

Capital Budget FY 2016

**Capital Improvement Program FY 2017-2021
Long-Range Master Plan FY 2016-2025**



Superintendent's Proposed Budget

HOWARD COUNTY PUBLIC SCHOOL SYSTEM

Superintendent's Proposed FY 2016 Capital Budget

Capital Improvement Program FY 2017–2021
Long-Range Master Plan FY 2016–2025

Superintendent

Renee A. Foose, Ed.D.

Board of Education

Elected Officials

Frank J. Aquino, Esq.

Ann De Lacy

Sandra H. French

Ellen Flynn Giles

Janet Siddiqui, M.D.

Cynthia L. Vaillancourt

Lawrence E. Walker

Student Member

Patrick B. Mikulis

**Superintendent's Proposed
FY 2016 Capital Budget**
Capital Improvement Program FY 2017–2021
Long-Range Master Plan FY 2016–2025

Prepared By:
The Office of School Planning
10910 Clarksville Pike
Ellicott City, Maryland 21042
(410) 313-6600

Beverly J. Davis, CPA
Director of Budget and Finance

Bruce Gist
Acting Executive Director
Facilities, Planning, and Management

Scott Washington
Manager of Design and Preconstruction Services

Joel A. Gallihue, AICP
Manager of School Planning

Jennifer Bubenko
Planning Specialist

Betsy Zentz
Interagency Specialist

Alan Moss
Project Manager CIP

Gina Petrick
Accountant

Catherine Bejm
Budget Assistant

This is a publication of the Howard County Public School System

*An electronic copy of the capital budget can be
found on the school system's website at www.hcpss.org*

Board of Education Howard County Public School System

10910 Clarksville Pike
Ellicott City, Maryland 21042
410-313-7194
Group Board Member email: boe@hcpss.org



Ellen Flynn Giles
Chairman

Phone: 410-880-0828

Fax: 410-313-6833

Email:
ellen_giles@hcpss.org

Term Expires 2016



Ann De Lacy
Vice-Chairman

Phone: 410-730-2402

Fax: 410-313-6833

Email:
ann_delacy@hcpss.org

Term Expires 2016



Frank J. Aquino, Esq.
Member

Phone: 443-878-9317

Fax: 410-750-0466

Email:
frank_aquino@hcpss.org

Term Expires 2014



Sandra H. French
Member

Phone: 410-531-2394

Fax: 410-313-6833

Email:
sandra_french@hcpss.org

Term Expires 2014



Janet Siddiqui, M.D.
Member

Phone: 443-535-8662

Fax: 410-313-6833

Email:
janet_siddiqui@hcpss.org

Term Expires 2016



Cynthia L. Vaillancourt
Member

Phone: 443-996-7751

Fax: 410-313-6833

Email:
cynthia_vaillancourt@hcpss.org

Term Expires 2014



Lawrence E. Walker
Member

Phone: 410-870-9776

Fax: 410-313-6833

Email:
lawrence_walker@hcpss.org

Term Expires 2014



Patrick B. Mikulis
Student Member

Fax: 410-313-6833

Email:
student_member@hcpss.org

Student Member 2014-2015

Renee A. Foose, Ed.D.
Superintendent
Email: superintendent@hcpss.org

Linda T. Wise
Deputy Superintendent
Email: linda_wise@hcpss.org

E. Grace Chesney
Chief Accountability Officer
Email: echesney@hcpss.org

Camille B. Jones
Chief Operating Officer
Email: camille_jones@hcpss.org

Susan C. Mascaro
Chief of Staff
Email: sue_mascaro@hcpss.org

Bruce Gist
Acting Executive Director
Facilities, Planning, and Management
Email: bruce_gist@hcpss.org

Patricia Daley
Executive Director
Special Education and Student Services
Email: patricia_daley@hcpss.org

Frank Eastham
Executive Director
School Improvement and Administration
Email: frank_eastham@hcpss.org

Clarissa Evans
Executive Director
School Improvement and
Curricular Programs
Email: clarissa_evans@hcpss.org

Rebecca Amani-Dove
Director
Communications
Email: rdove@hcpss.org

Juliann Dibble
Director
Professional and Organizational
Development
Email: juliann_dibble@hcpss.org

Beverly J. Davis
Director
Budget and Finance
Email: beverly_davis@hcpss.org

Superintendent's Proposed FY 2016 Capital Budget

Capital Improvement Program FY 2017–2021 Long-Range Master Plan FY 2016–2025

September 2014

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Superintendent's Proposed
FY 2016 Capital Budget
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Long-Range Master Plan FY 2016–2025

Executive Summary

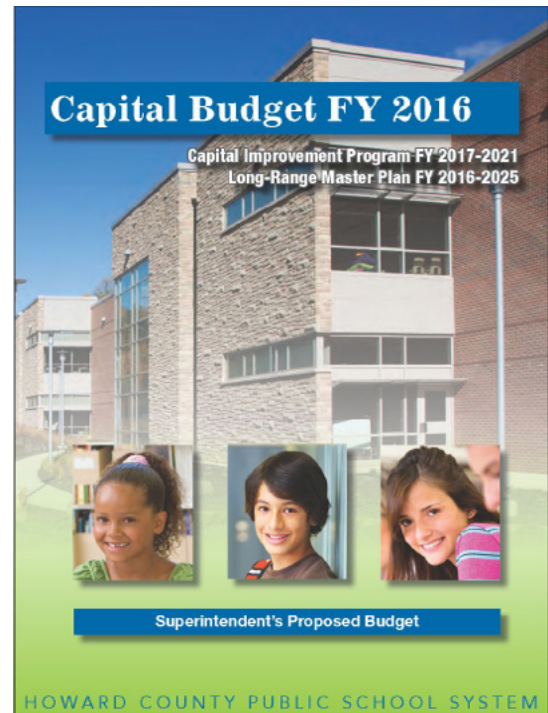
September 2014



Introduction

This document contains the Howard County Public School System's (HCPSS) Superintendent's Proposed FY 2016 Capital Budget and the FY 2017–2021 Capital Improvement Program (CIP) schedules proposed by the Superintendent for consideration by the Board of Education. Projects are presented for the next fiscal year and future years, documenting long range plans for the system. This document was preceded by an analysis of enrollment projection trends presented in the feasibility study presented June 26, 2014.

The Superintendent's Proposed Capital Budget is the first step in this annual process which will ultimately end with the approval of the Board of Education's final Capital Budget in May 2015. The Capital Budget is submitted much earlier than the Operating Budget to accommodate deadlines associated with submission of the Capital Budget to the Maryland State Department of Education.



The **Executive Summary** provides an introduction to the Superintendent's Proposed FY 2016 Capital Budget, the Capital Improvement Program FY 2017–2021, and the Long-Range Master Plan FY 2016–2025. It presents a high level overview of the budget process and the FY 2016 Superintendent's Proposed Capital Budget. Included in the Executive Summary is the Superintendent's Message which provides an overview of the budget issues. Among other information found in the Executive Summary is a discussion of the capital budget alignment with *Vision 2018*, enrollment projections and student capacities, recent capital budget accomplishments, the capital budget schedule, and information on the capital budget process.

System Information presents information on the county and the school system, with maps of school locations throughout the county displayed by school level. The Project Detail presents detail on each project presented in the proposed FY 2016 Capital Budget as well as information on longer range project plans. The **Supporting Data** includes data from the feasibility study, detailed enrollment data, school and region test for APFO, fully funded projects in process, facilities constructed and/or renovated with state funds, and the glossary.

Message from the Superintendent

September 11, 2014

Howard County Residents:

The Howard County Public School System (HCPSS) Superintendent's Proposed FY 2016 Capital Budget and the Capital Improvement Program FY 2017–2021, and the Long-Range Master Plan FY 2016–2025, provide the framework and plans for educational facilities that facilitate a supportive learning environment. The plans are integral to achieving *Vision 2018, Fulfilling the Promise of Preparation*, the school system's five-year strategic plan. The capital improvement program and long-range master plan address projected student capacity needs by implementing capital projects and facility renovations when and where they are most needed. The \$87.8 million FY 2016 proposed capital budget was developed from these plans.



The capital budget process, detailed within the Executive Summary, links capital planning with attendance area planning and addresses long-range planning issues identified in the annual feasibility study. Presented to the Board of Education on June 27, 2014, this year's Feasibility Study provided new enrollment projections and proposed future redistricting.

Several factors affect the total FY 2016 Capital Budget. This year's capital improvement program provides for student capacity, renovations, and various other improvements that staff, parents, and community leaders have identified as needed. The formula used by the state to calculate school construction costs has increased to \$260.98 per square foot. Project budgets have increased to reflect rising costs such as the requirement to pay prevailing wage on all projects after July 1, 2014, costs to comply with LEED requirements, and general inflationary increases.

Highlights of the FY 2016 Capital Budget and Long-Range Master Plan are noted below:

- The FY 2016 Capital Budget is \$87.8 million.
- The cumulative total of the ten-year Long-Range Master Plan for FY 2016–2025 is \$1.32 billion and includes funding for four new elementary schools, a new high school, a replacement middle school, and a new middle school which are necessary to meet projected enrollment growth and capacity needs. In addition, it includes approximately \$880.9 million in systemic renovations, modernizations, major programmatic renovations, and additions to existing school facilities.
- HCPSS is projected to enroll 12,013 additional students between 2015 and 2025. A total of 5,462 (Grades K-12) additional seats are provided in the FY 2016–2025 Long-Range Master Plan. Coupled with the 54,522 seats of existing capacity in 2014 and the use of relocatable classrooms where required, the proposed capital program is sufficient to meet near-term student enrollment needs.

One of the most significant updates to the FY 2016–2025 Long-Range Master Plan is the addition of new school projects to reflect the increase in capacity needs resulting from development and growth in the County. These replace the administrative building projects being reexamined for alternative solutions that were included in prior plans. The result is a long-range master plan that more accurately predicts future funding needs.

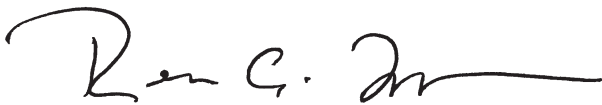
Funding of the capital budget currently depends predominantly upon the issuance of bonds by the County and state. With rising costs and growing capacity needs, the future capital needs of the school system are projected to markedly surpass current County bonding limits. We look forward to continuing our ongoing discussions with County Council and other stakeholders regarding both dedicated and alternative financing sources for education.

In alignment with *Vision 2018*, we are implementing best practices to improve the existing capital planning processes. These will ensure that future master plans provide a vision for capital plans and investments based upon in depth analysis, and that they incorporate educational needs as well as financial factors. A new Long-Range Capital Planning Committee will assist in the development of the long-range master plan. The committee will evaluate and prioritize the many potential projects, making recommendations based upon support for Vision 2018, updated data from the annual feasibility study, stakeholder input, and financial considerations.

The FY 2016 Capital Budget Schedule is detailed at the end of the Executive Summary and includes the dates of Board public hearings and work sessions. The Board of Education will give final approval to the capital budget on May 22, 2015 at 9:00 a.m.

I look forward to working with the Board of Education, parents, community members and business leaders to secure the necessary funding and support for the improvements to Howard County public school facilities.

Sincerely,

A handwritten signature in black ink, appearing to read "Renee A. Foose", followed by a long horizontal flourish.

Renee A. Foose, Ed.D.
Superintendent

FY 2016 Capital Budget

Superintendent's Proposed

September 11, 2014

(In Thousands)

Capacity	Project	Occupancy	Approved Appropriations	Local Bonds	Codes	Total FY16 Request	Requested Project Totals Through FY16
760	Wilde Lake MS Replacement School	Aug 2017	\$ 10,858	\$ 18,234	(C)	\$ 18,234	\$ 29,092
-	Patuxent Valley MS Renovation	Aug 2017	8,145	10,300	(C)	10,300	18,445
100	Swansfield ES Renovation/Addition	Aug 2017	1,898	12,361	(C)	12,361	14,259
100	Waverly ES Renovation/Phase II Addition	Aug 2018	-	10,200	(C)	10,200	10,200
-	Oakland Mills MS Limited Renovation	Aug 2018	-	4,000	(C)	4,000	4,000
600	New Elementary School #42	Aug 2019	-	2,807	(P)	2,807	2,807
-	Hammond HS Renovation	Aug 2020	-	3,790	(P)	3,790	3,790
	Systemic Renovations/Modernizations		218,887	9,263	(P,C,E)	9,263	228,150
	Roofing Projects		40,537	5,000	(P,C,E)	5,000	45,537
	Playground Equipment		2,380	300	(E)	300	2,680
	Relocatable Classrooms		16,210	1,500	(P,C,E)	1,500	17,710
	Site Acquisition & Construction Reserve		20,836	2,000	(P,C)	2,000	22,836
	Technology		29,486	7,500	(C,E)	7,500	36,986
	Planning and Design		-	300	(P)	300	300
	Barrier Free		5,228	200	(P,C,E)	200	5,428
	TOTALS		\$ 354,465	\$ 87,755		\$ 87,755	\$ 442,220

(P) Planning
 (C) Construction
 (E) Equipment

FY 2017-2021 Capital Improvement Program

Superintendent's Proposed

September 11, 2014

(In Thousands)

Grades	Capacity	Project	Occupancy	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year CIP Total
6-8	760	Wilde Lake MS Replacement School	Aug 2017	\$ 12,895	\$ -	\$ -	\$ -	\$ -	\$ 12,895
6-8	-	Patuxent Valley MS Renovation	Aug 2017	10,085	-	-	-	-	10,085
K-5	100	Swansfield ES Renovation/Addition	Aug 2017	10,832	-	-	-	-	10,832
K-5	100	Waverly ES Renovation/Phase II Addition	Aug 2018	16,898	-	-	-	-	16,898
6-8	-	Oakland Mills MS Limited Renovation	Aug 2018	5,000	5,000	-	-	-	10,000
K-5	600	New Elementary School #42	Aug 2019	11,640	23,633	2,460	-	-	37,733
9-12	-	Hammond HS Renovation	Aug 2020	18,124	18,999	18,374	19,000	-	74,497
6-8	156	Ellicott Mills MS Addition	Aug 2019	432	3,440	2,293	-	-	6,165
9-12	-	Oakland Mills HS Renovation	Aug 2022	-	-	-	6,167	38,685	44,852
K-5	600	New Elementary School #43	Aug 2023	-	-	-	4,180	14,300	18,480
		- Systemic Renovations/Modernizations		18,708	59,909	88,114	78,338	52,135	297,204
		- Roofing Projects		5,000	5,000	5,000	5,000	5,000	25,000
		- Playground Equipment		300	300	300	300	300	1,500
		- Relocatable Classrooms		1,500	1,500	1,500	1,500	1,500	7,500
		- Site Acquisition & Construction Reserve		2,000	2,000	2,000	2,000	2,000	10,000
		- Technology		10,000	6,000	5,000	7,500	10,000	38,500
		- School Parking Lot Expansions		600	600	600	600	600	3,000
		- Planning and Design		300	300	300	300	300	1,500
		- Barrier Free		200	200	200	200	200	1,000
		TOTALS		\$ 124,514	\$ 126,881	\$ 126,141	\$ 125,085	\$ 125,020	\$ 627,641

FY 2016-2021 Long-Range Systemic Renovation Projects

Superintendent's Proposed

September 11, 2014

(In Thousands)

Project	FY 2016 Local	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Totals
Hollifield Station ES Control Systems	\$ 321	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 321
Mayfield Woods MS Electronics (Fire Alarm)	215	-	-	-	-	-	215
Manor Woods ES Electronics (Fire Alarm)	215	-	-	-	-	-	215
Lime Kiln MS Control Systems	235	-	-	-	-	-	235
Clarksville ES Doors/Frames	241	-	-	-	-	-	241
Rockburn ES Boiler	313	-	-	-	-	-	313
Glenwood MS Boiler/Water Heater	500	3,000	-	-	-	-	3,500
Bonnie Branch MS HVAC	23	650	-	-	-	-	673
Dunloggin MS Renovation + Addition	-	2,943	17,284	11,523	-	-	31,750
Talbott Springs ES Renovation	-	2,268	11,462	8,264	-	-	21,994
Patapsco MS Renovation	-	3,147	16,887	11,258	-	-	31,292
Jeffers Hill ES Renovation	-	-	1,799	9,409	6,273	-	17,481
Elkridge ES Renovation	-	-	2,914	16,784	11,189	-	30,887
Hammond MS Renovation	-	-	2,863	14,959	9,973	-	27,795
ARL HVAC/Controls	-	-	-	600	8,550	-	9,150
Pointers Run ES Renovation	-	-	-	3,000	12,271	16,514	31,785
Forest Ridge ES Renovation	-	-	-	2,627	11,169	12,446	26,242
Mayfield Woods MS Renovation	-	-	-	2,990	12,213	16,475	31,678
Energy Projects	500	-	-	-	-	-	500
Other Systemic	6,700	6,700	6,700	6,700	6,700	6,700	40,200
TOTALS	\$ 9,263	\$ 18,708	\$ 59,909	\$ 88,114	\$ 78,338	\$ 52,135	\$ 306,467

FY 2016-2025 Long-Range Master Plan

Superintendent's Proposed

September 11, 2014

(In Thousands)

Project	Approved Appropriations	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total Approp. plus FY16-FY25 Request
Wilde Lake MS Replacement School	\$ 10,858	\$ 18,234	\$ 12,895	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,987
Patuxent Valley MS Renovation	8,145	10,300	10,085	-	-	-	-	-	-	-	-	28,530
Swansfield ES Renovation/Addition	1,898	12,361	10,832	-	-	-	-	-	-	-	-	25,091
Waverly ES Renovation/Phase II Addition	-	10,200	16,898	-	-	-	-	-	-	-	-	27,098
Oakland Mills MS Limited Renovation	-	4,000	5,000	5,000	-	-	-	-	-	-	-	14,000
New Elementary School #42	-	2,807	11,640	23,633	2,460	-	-	-	-	-	-	40,540
Hammond HS Renovation	-	3,790	18,124	18,999	18,374	19,000	-	-	-	-	-	78,287
Ellicott Mills MS Addition	-	-	432	3,440	2,293	-	-	-	-	-	-	6,165
Oakland Mills HS Renovation	-	-	-	-	-	6,167	38,685	25,790	-	-	-	70,642
New Elementary School #43	-	-	-	-	-	4,180	14,300	14,300	11,518	-	-	44,298
Centennial HS Renovation	-	-	-	-	-	-	-	6,151	38,592	25,728	-	70,471
New Elementary School #44	-	-	-	-	-	-	-	4,320	15,670	15,670	11,334	46,994
New Elementary School #45	-	-	-	-	-	-	-	-	4,460	16,330	16,330	37,120
New High School #13	-	-	-	-	-	-	-	-	-	10,764	51,226	61,990
New Middle School #21	-	-	-	-	-	-	-	-	-	-	4,880	4,880
Systemic Renovations/Modernizations	218,887	9,263	18,708	59,909	88,114	78,338	52,135	61,293	64,358	67,576	70,955	789,536
Roofing Projects	40,537	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	90,537
Playground Equipment	2,380	300	300	300	300	300	300	300	300	300	300	5,380
Relocatable Classrooms	16,210	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	31,210
Site Acquisition & Construction Reserve	20,836	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	40,836
Technology	29,486	7,500	10,000	6,000	5,000	7,500	10,000	5,000	7,500	10,000	6,000	103,986
School Parking Lot Expansions	4,200	-	600	600	600	600	600	600	600	600	600	9,600
Planning and Design	-	300	300	300	300	300	300	300	300	300	300	3,000
Barrier Free	5,228	200	200	200	200	200	200	200	200	200	200	7,228
TOTALS	\$ 358,665	\$ 87,755	\$ 124,514	\$ 126,881	\$ 126,141	\$ 125,085	\$ 125,020	\$ 126,754	\$ 151,998	\$ 155,968	\$ 170,625	\$ 1,679,406

Ten-Year Long-Range Master Plan = \$1,320,741



VISION 2018

Fulfilling the Promise of Preparation

Vision

Every student is **inspired** to learn and **empowered** to excel.

Mission

We cultivate a **vibrant** learning community that prepares students to thrive in a **dynamic** world.

GOAL 1

Students

Every student achieves academic excellence in an inspiring, engaging, and supportive environment.

GOAL 2

Staff

Every staff member is engaged, supported, and successful.

GOAL 3

Families and the Community

Families and the community are engaged and supported as partners in education.

GOAL 4

Organization

Schools are supported by world-class organizational practices.

Guiding Principles

We believe in...

- Achieving excellence in all we do
- Developing each student's unique gifts
- Engaging students in relevant, experiential, and personalized learning
- Cultivating creative problem solving, critical thinking, and innovation
- Promoting integrity, civility, and global citizenship
- Enriching learning by honoring our diversity
- Fostering a culture of collaboration, trust, and shared responsibility
- Removing barriers to success

THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

Capital Budget Support of *Vision 2018*

Alignment with Strategic Plan

Vision 2018: Fulfilling the Promise of Preparation is the Board's strategic plan to build an educational program that is among the best in the world. While much of this plan is implemented in the operating budget, the CIP supports achievement of each goal in *Vision 2018*.

The Capital Improvement Program (CIP) supports *Goal 1 Strategy 1.4.6: Configure physical spaces to facilitate learning* by providing spaces configured to facilitate learning in accordance with board approved educational specifications. The CIP also supports *Strategy 1.8.2: Provide opportunities for students to explore a wide variety of experiences and to build competencies in academics, athletics, and the arts*. Classrooms are specified to contain students according to approved class size ratios. Beyond the regular classrooms, facilities have specialized spaces which are equipped to deliver all approved programs.



The CIP provides facilities with program areas for physical education and play areas for unstructured activity promoting physical activity as a part of every child's daily routine. Walking and biking are facilitated with pathways and bicycle racks. Facilities include a cafetorium outfitted with the necessary equipment to deliver approved menu items.



Facilities also provide opportunities for students to learn how to balance their choices in activity modalities, including independent activity, face-to-face interaction, athletics, creative endeavors, and screen time. Facilities are designed to physically and socially activate students, staff, and the community. Stimulating indoor and outdoor spaces utilize light and appealing design to create spaces for impromptu use.

Goal 2 seeks to have every staff member engaged, supported, and successful. Facility planning includes cross functional representatives of the school system at all levels of construction and renovation process from acquisition of land to engagement during construction. Planning, Construction, and Maintenance information are provided

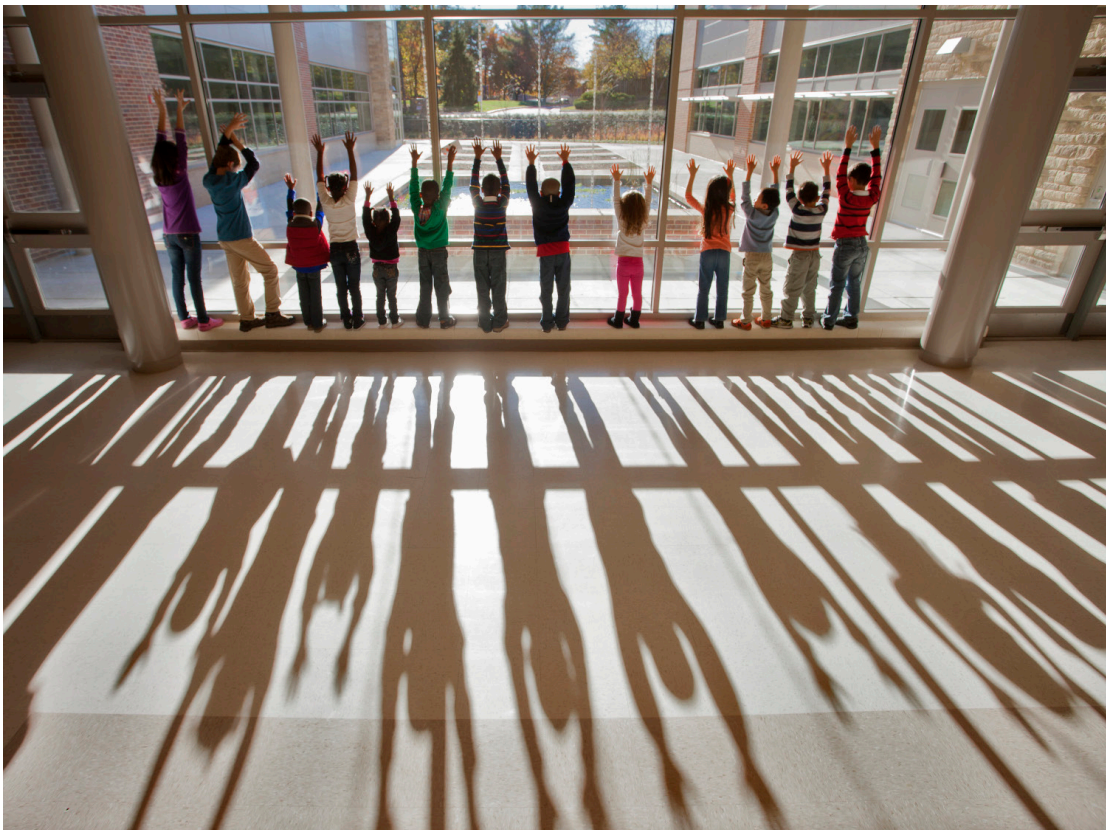
online through Board Docs as well as separate web pages. Staff is engaged with satisfaction surveys and presentations at training sessions.

Capital Budget Support of *Vision 2018*

Goal 3 seeks to have families and the community engaged and supported as partners in education. Facilities are designed with secure access points to ensure visitors' needs are addressed while protecting students and staff from intrusion. Classroom and staff work areas are designed to be comfortable and well lit. Projects include outreach to the community through meetings and presentations to ensure notification and collection of valuable stakeholder input. Staff coordinate with local officials, safety inspectors, and environmental regulators in support of student wellbeing.



Goal 4 seeks to ensure that schools are supported by world-class organizational practices. Facilities and equipment are constructed according to required codes and best practices. Regular safety and maintenance inspections are conducted according to local, state, and national standards. Industry best practices are implemented and benchmarks are identified and used. Examples include LEED standards and Green School Certification. Facilities are designed to incorporate technology selected to support overall organized goals.



Capital Planning

Capital planning is an ongoing process where the annual Capital Improvement Program (CIP) and Long-Range Master Plan are updated to reflect changes in enrollments, building capacities and other conditions. The Howard County Public School System (HCPSS) provides other relevant publications which should be taken as a whole with the capital budget. These include the Feasibility Study, Educational Facility Master Plan, and the Comprehensive Facility Maintenance Plan.

The formulation of the FY 2016 Capital Budget, FY 2017–2021 Capital Improvement Plan, and the FY 2016–2025 Long-Range Master Plan begins with the annual completion of enrollment projections first presented in the June 2014 Feasibility Study. The results of this projection are also included in this document in pre- and post-measures charts. Capacities of schools dictate the calculation of percentage capacity utilization, a measure which allows the effect of school projections to be illustrated in a meaningful way. A school with capacity utilization over 110 percent is deemed to be over-utilized, while a school below 90 percent capacity utilization is deemed to be under-utilized. This range is set by Board of Education policy.

Major findings from the June 2014 Feasibility Study which have been factored into this request include:

- The projected need for New ES #42 is more urgent than was previously projected. A site has been procured and approved allowing planning in FY 2016.
- The renovation of Dunloggin MS should include new capacity. The renovation presents an opportunity to gain capacity in an area with strong growth.
- Ellicott Mills MS should be expanded to a capacity in line with the larger schools identified in the Gilbert MS Capacity Study.
- Trends support inclusion of three new elementary school projects and one new middle school project in the long range master plan.

The redistricting of school attendance areas is an integral part of the CIP. The HCPSS is responsible for ensuring that school buildings in the county are run efficiently and effectively. This means keeping schools at or near capacity and ensuring that most available seats are used before new schools would be built. Redistricting is used to ensure that existing capacity and the scheduled capital projects efficiently accommodate projected student enrollments. While redistricting plans are implied for new facilities proposed in this plan, formal approval of those plans will not occur until the year before they will take effect. Changing circumstances may require different plans.

For planning purposes, the school attendance areas are grouped into six planning regions. Redistricting plans may include more than one region. The schools and their regions are identified on the elementary school level page, middle school level page, and the high school level page found in the Supporting Data section.

Capital Planning and Growth Management

General Plan

The Capital Improvement Plan (CIP) is developed in alignment with the Board's strategic plan. However it must conform with another important planning document, the Howard County General Plan. Known as Plan Howard 2030, it includes annual residential development targets through 2030. The HCPSS will work closely with the Howard County Government to identify future funding sources so that our capital plan best supports the growth management goals of the Howard County General Plan. The Capital Budget is presented to the Howard County Planning Board so they may make a finding of plan conformance to the County Council.

PLAN HOWARD
your county. your plan.



The General Plan policy most relevant to this Capital Budget is *Policy 6.1h -- Schools. Make efficient use of existing school capacity avoiding unnecessary capital outlays.* HCPSS has conducted three years of redistricting since the adoption of PlanHoward 2030, in part to make more efficient use of existing schools. A total of 4,326 students were moved. More than three quarters of these students were relocated to existing schools. In 2011, prior to these redistricting efforts, 51 percent of students were in schools which met BOE target of 90-110 percent utilization. For the school year beginning in the fall of 2014, 64 percent of students will be in schools that meet this target. This was accomplished with only a four percent increase in capacity.

The General Plan also guides land development in accordance with relevant state growth management laws like the 1997 Priority Funding Areas Act and Smart Green and Growing Act which direct state spending to existing communities and places where local governments want state investment to support future growth, rather than farmland or undeveloped land. The HCPSS has invested heavily in priority funding areas of late with the construction of Ducketts Lane ES and Thomas Viaduct MS. The only projects proposed outside of the priority funding area today are the systemic renovations necessary to maintain systems in existing school, like boiler or HVAC upgrades.

Adequate Public Facilities Ordinance

The Adequate Public Facilities Ordinance (APFO) ties future residential construction in Howard County to projected school enrollments and school capacities. Elementary and middle school attendance areas that show a projected enrollment over 115 percent of a school's program capacity are closed to future residential development until an attendance area adjustment or a capital improvement can be completed. The APFO test for opening or closing a school attendance area to residential building looks at the projected population of a school three years out from the current year.

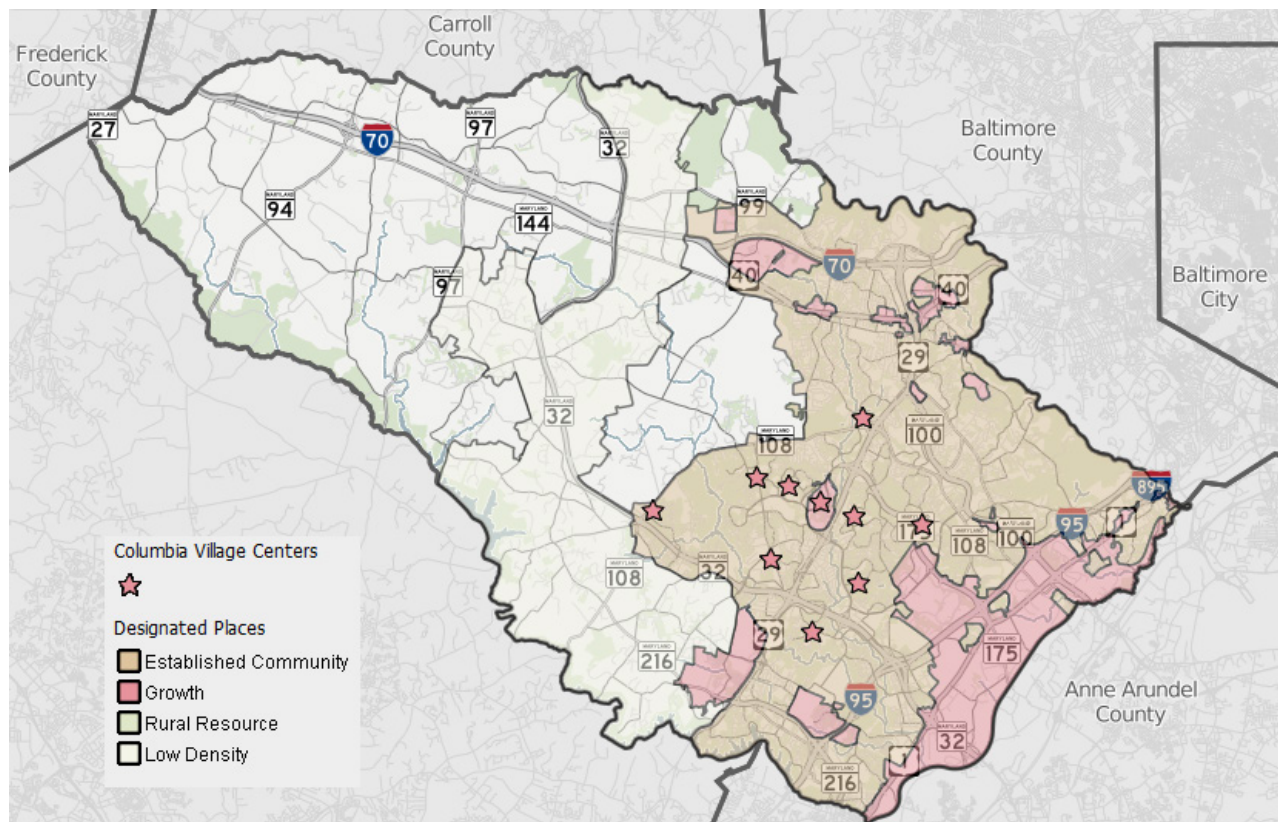
Capital Planning and Growth Management

The APFO charts that appear in the Supporting Data section, are the charts that were approved for submission to the County Council by the Board of Education on May 9, 2013, and subsequently submitted to the Howard County Council and begin with the year 2016. The APFO charts do not include new schools or projects when their sites have not yet been acquired. As the school system secures deeds for the sites to these planned schools or projects, they will be reflected in that year's APFO chart.

Along with the elementary and middle school test, a regional test within planning regions at the elementary level is also included in the ordinance. Using the APFO Charts as indicators at the elementary level, all regions are "open" in 2016 and one school is "closed" in 2016. At the middle school level four schools are "closed" in 2016.

With the pre-/post-measures approach, the APFO formatted charts found in the Supporting Data section are in the pre-measures format. These charts represent the adjusted FY 2014 Capital Budget projects and the new projections. The post-measures charts represent the recommended capital projects for the FY 2015 Capital Improvement Program and redistricting results from the 2014 Feasibility Study and are for demonstrative purposes only.

The General Plan process was followed by adoption of the growth tiers map. Future development and school needs are planned in growth areas or village centers.



Enrollment Projections and School Capacities

Methodologies

The formulation of the FY 2016 Capital Budget, FY 2017-2021 Capital Improvement Program, and the FY 2016-2025 Long-Range Master Plan begins with the annual completion of enrollment projections first published in the feasibility study. The projections included in this document are the result of a collaborative effort between the HCPSS, Howard County Department of Planning and Zoning, Maryland Department of Health and Mental Hygiene, and other county and state agencies.

The calculation of the future enrollment projection is based upon a “cohort survival ratio” method of projecting student enrollments. This methodology looks at past population patterns within the county to construct “survival ratios” in predicting a particular grade’s migration through the school system. For example, cohort-survival ratios predict how many second graders will result from last year’s first graders, how many third graders will result from last year’s second graders, and continues until the number of twelfth graders from last year’s eleventh graders is predicted. A geographical cohort survival ratio is used rather than a school-based cohort survival ratio to maintain comparability regardless of any redistricting. Finally, the effects of new housing, the net effect of resale of existing housing, and programs housed at the school that impact enrollment are added to the cohort.

Capacities

Equitable evaluation of the impact of projected enrollment growth requires calculation of the capacities of schools. Capacities are not necessarily fixed to the capacity designed when a building first opened. Changes in use, program, and standards can effectively change capacity.

High School capacities were evaluated and updated by the Board of Education in March 2009. High school program capacities are a product of either 80 or 85 percent of the total number of teaching stations multiplied by 25 students, exclusive of special education classrooms, and factored with consideration that not all teaching stations can be scheduled for use every period of the school day. Further, special-use teaching stations may not be adaptable for academic programs even if the space is available for a period of the school day.

Middle school capacities were evaluated and approved by the Board September 26, 2013, after a full study and report by Gilbert Architects Inc. Middle school program capacities are a product of 95 percent of the total number of teaching stations multiplied by 20.5 students, exclusive of special education classrooms. Like high schools, not all teaching stations can be scheduled for use every period of the school day.

Elementary school program capacities are based on 22 students for each Kindergarten classroom, 19 students for each classroom in Grades 1 and 2, and 25 students for each classroom in Grades 3–5. Elementary school special education classroom capacities are established by the mandated student/teacher ratios for the various programs. Not included in the capacities for elementary schools are resource/instructional spaces that are utilized on a school wide basis where no one group of students is assigned exclusively. Some examples of spaces not included in the capacity are gymnasiums or multipurpose rooms, cafeteriums, art rooms, music rooms, media centers, gifted and talented rooms, or rooms dedicated to regional programs such as RECC or Pre-K.

Types of Capital Projects

The Capital Improvement Plan (CIP) provides for all facilities needs for the school system. Projects are identified by their purpose as described below.

Capacity Projects

New facilities or additions are proposed when projected enrollments cannot be accommodated reasonably within available capacity. The decision to construct a new facility or build an addition on an existing school involves consideration of fiscal implications as well as consideration of the following:

- Growth and location of population to be served
- Available capacity in surrounding schools
- Housing needs of current and desired educational programs

Each capacity project in the Capital Improvement Program (CIP) has first been evaluated in the annual feasibility study which balances school boundary redistricting choices with capital investments. If the attending areas for existing schools can be adjusted, capital expenditures can be avoided or at least delayed. The Board of Education will review the CIP and set direction as appropriate during capital budget presentations each year. The opening of new schools requires redistricting.



Redistricting is not annual but potential options are evaluated annually in the Feasibility Study.

From the receipt of planning funds until completion of a project, it typically requires a maximum of three years to plan and construct an elementary and/or middle school and four years for a high school. Some parts of the construction process can be expedited at cost.

Non-Capacity Projects

Capital projects which don't produce capacity are "systemic" and serve the long-term plans of HCPSS and the state of Maryland by keeping and maintaining the systems that support 30-40 year infrastructure investments. Most maintenance investments are covered by the operating budget and documented in the annual Comprehensive Maintenance Program published as a requirement of MSDE. Each year staff evaluate comprehensive maintenance program plans to identify projects that exceed regular maintenance and add these project to the capital improvement program as appropriate.

Renovations of existing schools are proposed when repairs of the structure's internal systems are no longer economically feasible. As the Comprehensive Facility Master Plan is updated using the results of ongoing facility assessments, specific projects are identified in the long-range master plan.

Types of Capital Projects

The decision to renovate an existing school involves the following considerations:

- Prioritization of needs based upon the current facility assessment.
- Optimal sequencing to ensure eligibility for state funding.
- Existing electrical, HVAC, roofing and/ or other major mechanical systems needs.
- Educational space needs.
- Health and Safety needs
- Americans With Disability Act (ADA) needs.
- Need to provide improved spaces for general teaching areas and/or supporting areas.

When renovating an older school there are multiple considerations of how to best balance the existing footprint of the building against requirements defined in newer versions of the educational specifications. Renovation guidelines have been developed to provide a set of standards, guidelines, and procedures for use by HCPSS administrative staff and architectural/engineering firms engaged in the planning and design of renovation work for the school system.

Roofing Projects

A well planned roofing program is critical to all other systems in a capital facility. When roofing systems wear, the damage from a failure can impact other systems and multiply costs. HCPSS regularly inspects roofing systems and provides reports to the State of Maryland. Planning and project execution must balance system warranties, state funding eligibility and the risk of maintenance deferral.

Playground Equipment

Elementary school students are stimulated by interesting and engaging playground installations. The playground planning process considers the needs of a wide range of ages and skills to develop strength, social skills, coordination, balance and motor planning. Each year various playgrounds are replaced, repaired or upgraded based upon need.



Types of Capital Projects

Relocatable Classrooms

Relocatable classrooms are pre-fabricated, stand-alone buildings which provide temporary capacity to a school to relieve overcapacity, provide temporary surge space during renovations/additions, or provide space for a school's program needs. Currently there are 234 modular/relocatable classrooms for Grades K-12 being used by the HCPSS, including several larger modular units of at least five classrooms.

In some cases modular units are integrated into a building's core facility, such as at St. John's Lane, and Waverly Elementary Schools, and Clarksville Middle School. These units are included in building capacity as they are considered permanent additions. In recent renovations modular units have been replaced like Bollman Bridge Elementary School. Similar plans are underway at Deep Run Elementary School and Patuxent Valley Middle School. The school system conducts annual reviews of the physical condition and usage of all relocatable/modular units. When units are inspected, the cost of repairs is weighed against the option of retiring the units.

Site acquisition and construction reserve

The selection and acquisition of appropriate school sites figures prominently in the development of a capital program. Each proposed school site is carefully evaluated prior to acquisition according to Board-approved selection criteria identified in Policy 6000 Site Selection and Acquisition. Delays in acquisition of suitable school sites may affect the timing of construction of needed schools, resulting in overcrowding situations. HCPSS continues to maintain a "land bank" to purchase potential sites or portions of land to augment sites. Larger sites identified in the subdivision review process may be reserved to be budgeted as line items in future capital budgets. This fund also is used as a reserve for unanticipated construction costs. Uses of the fund in this way has been infrequent.



Facility Use, Acreage, and Capital Projects

HCPSS Elementary Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Atholton ES	12.31	3	\$ 447,569	1961	1980(A), 2001(R), 2002(R), 2006, 2007
Bellows Spring ES	40.00	5	\$ 15,105,663	2003	2009(A), 2011(A)
Bollman Bridge ES	16.95	2	\$ 6,274,000	1988	1994(A), 2008(C), 2013(R/A)
Bryant Woods ES	9.25	4	\$ 695,406	1968	1983, 1984(A), 2004(R), 2007
Bushy Park ES	19.20	-	\$ 24,000,000	2007	(Replacement) replaced Old Bushy Park with a new school
Centennial Lane ES	11.22	5	\$ 1,101,140	1973	1987(A), 2007(R), 2008(A)
Clarksville ES	10.69	1	\$ 435,986	1964	1980(A), 1986 HVAC, 2002(R), 2006
Clemens Crossing ES	10.80	3	\$ 1,853,590	1979	1988(A), 2009(R)
Cradlerock ES	33.16	3	\$ 4,249,000	1976	1998(A), 2001(R), 2003(R), 2007, 1996 Dasher Green Head Start
Dayton Oaks ES**	22.74	-	\$ 21,804,000	2006	New school 2006
Deep Run ES	11.67	5	\$ 6,403,575	1990	1998(A), 2009(A)
Ducketts Lane ES	10.03	-	\$ 34,447,000	2013	New school 2013
Elkridge ES	48.581 shared	4	\$ 7,139,588	1992	1998
Forest Ridge ES	20.85	5	\$ 6,050,000	1992	2001/2 (R)/(A), 2009(A)
Fulton ES	99.0 shared	-	\$ 6,156,161	1997	2003(A)/(R), 2006
Gorman Crossing ES	15.00	2	\$ 5,766,716	1998	2007, 2013(A)
Guilford ES	11.00	5	\$ 216,278	1954	1959(R), 1982, 1986(A), 1989, 2006
Hammond ES	35.00 shared	1	\$ 2,381,673	1971	(includes Hammond MS & Hammond ES) 1987, 1988/9, 1996/7 (A), 2007, 2011(R/A)
Hollifield Station ES	14.50	3	\$ 6,017,889	1997	2002(R)/(A), 2009(A)
Ilchester ES	27.22 shared	2	\$ 6,430,404	1996	2000/1, 2008(A)
Jeffers Hill ES	10.00	2	\$ 1,747,200	1974	1998/1999(R)
Laurel Woods ES	27.00	2	\$ 1,658,399	1973	1987(A), 2004(R), 2005(ROOFING PROJECT), 2008(A)
Lisbon ES	22.55	1	\$ 2,056,000	1976	1988(A), 2006
Longfellow ES	9.50	8	\$ 775,481	1970	1986(R), 1994(A), 2008(A)
Manor Woods ES	43.23	1	\$ 5,900,000	1994	2004(R)
Northfield ES	10.00	1	\$ 20,330,000	1968	1986(A), 2007, 2011
Phelps Luck ES	10.00	7	\$ 1,036,792	1972	1989, 1999(A), 2007, 2013(R/A)
Pointers Run ES	13.69	9	\$ 6,645,000	1991	2000, 2001/2, 2006, 2008(A)
Rockburn ES	8.74	1	\$ 5,849,000	1993	2004(A), 2007
Running Brook ES	9.00	3	\$ 776,406	1970	1984(A)/(REMODELING), 2004 (ROOF REPLACEMENT), 2006, 2014(A)
St. John's Lane ES	10.00	6	\$ 235,985	1954	1988(A), 1959, 1966, 1975(MODERNIZ)1988, 1995, 2000(A)/(R), 2009(A)
Stevens Forest ES	10.00	5	\$ 764,941	1972	1995(A), 2013(R/A)
Swansfield ES	10.00	4	\$ 764,941	1972	1988(A), 1998(R), 2008(A)
Talbott Springs ES	10.00	7	\$ 1,224,800	1973	1999(ROOFING), 2000(A) & (R), 2008(A)
Thunder Hill ES	14.93	1	\$ 14,515,430	1970	1987, 1988(A), 1988, 1989, 2007, 2012
Triadelphia Ridge ES	78.3 shared	-	\$ 6,219,488	1998	2005(A), 2006
Veterans ES	23.66	7	\$ 19,000,000	2007	New school 2007
Waterloo ES	10.00	4	\$ 435,221	1964	1987(A)/(MODERNIZATION), 1998(A), 2009(R)
Waverly ES	11.49	3	\$ 6,669,587	1990	2007
West Friendship ES	17.85	-	unknown	1925	(7 rm school (1925)) 1950, 1962, 1971(MODERNIZATION), 1978(A), 2004(R), 2005(ROOF), 2009(A)
Worthington ES	19.69	1	\$ 2,385,850	1976	1989, 1998, 2007, 2008(R)

* Estimated Investment: based on available records; in process of updating data.

**Dayton Oaks shares 12.66 acres with Recreation and Parks play fields.

Facility Use, Acreage, and Capital Projects

HCPSS Middle Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Bonnie Branch MS	27.22 shared	2	\$ 7,819,520	1999	1999(A)
Burleigh Manor MS	27.00	-	\$ 8,107,000	1992	
Clarksville MS	20.43	5	\$ 5,662,361	1979	2004, 2006(A), 2008®, 2010(Masonry)
Dunloggin MS	20.00	5	\$ 1,963,323	1973	1999(R)
Elkridge Landing MS	48.58	2	\$ 9,000,000	1995	
Ellicott Mills MS	16.22	3	\$ 9,430,537	1939	(Replacement) 1957, 1962, 1973, 2001
Folly Quarter MS	78.3 shared	-	\$ 11,077,000	2003	
Glenwood MS	30.00	6	\$ 1,179,168	1967	1999(R), 2000(R), 1986(Air Conditioning)
Hammond ES/MS	35.00 shared	3	\$ 22,650,672	1971	includes Hammond MS & Hammond ES, 2011
Harper's Choice MS	19.67	5	\$ 1,974,697	1973	1999(R), 2000
Lake Elkhorn MS	33.16 shared	1	\$ 4,244,500	1976	includes Dasher Green ES & Owen Brown MS
Lime Kiln MS	99.0 shared	-	\$ 8,420,400	1999	2005(A)
Mayfield Woods MS	27.00	2	\$ 8,501,354	1991	
Mount View MS	35.75	2	\$ 8,617,000	1993	
Murray Hill MS	25.00	6	\$ 7,858,000	1997	
Oakland Mills MS	20.00	-	\$ 1,803,876	1972	1998 (R)
Patapsco MS	21.13	2	\$ 1,391,791	1969	1974, 1996, 2003(R)/(A), 2004 (R)/(A)
Patuxent Valley MS	30.00	6	\$ 8,261,000	1989	
Thomas Viaduct MS	20.21	-	\$ 34,755,000	2014	
Wilde Lake MS	21.00	9	\$ 1,323,314	1969	1974, 1998(R)

HCPSS High Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Projects
Atholton HS	36.28	18	\$ 1,423,493	1966	1972, 1977, 1978, 1988, 1987(A), 1997(R), 2003(R)/(A),
Centennial HS	43.00	4	\$ 6,337,867	1977	1998(R), 2002(R)/(A), 2011(A)
Glenelg HS	40.94	-	\$ 56,345,257	1958	1963, 1967, 1969, 1971, 1972(R), 1986(A), 1988(A)/(R), 2003, 2008(A), 2009(Auditorium), 2011(HVAC)
Hammond HS	33.14	4	\$ 6,321,000	1976	1996(A), 1998®, 2011(A)
Howard HS	41.00	6	\$ 698,781	1951	1960, 1964, 1971, 1975, 1977, 2001(A)/(R), 2002(R), 2004, 2006, 2009(Windows)
Long Reach HS	50.00	3	\$ 20,373,000	1996	
Marriotts Ridge HS	42.40	-	\$ 34,115,895	2005	
Mt. Hebron HS	40.05	4	\$ 55,560,000	1965	1968, 1972, 1976, 1977-1978, 1983(MODERNIZATION), 1997-99(A), 2004(R), 2005(R), 2011
Oakland Mills HS	28.60	-	\$ 3,579,000	1973	1991-92(R), 1998(R), 2004(A)
Reservoir HS	99.0 shared	5	\$ 27,224,000	2002	
River Hill HS	64.2	-	\$ 21,473,000	1994	
Wilde Lake HS	31.25	-	\$ 21,202,391	1996	(Replacement)

HCPSS Countywide Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Projects
Applications & Research Lab	45.48 shared	-	\$ 1,502,581	1968	1970, 1974, 1986, 1997/1998(R), 2002(NEW ROOF), 2006
Cedar Lane Special	99.0 shared	-	\$ 18,663,069	2005	2005(A)
Homewood	45.48 shared	1	\$ 8,620,912	2002	

HCPSS Other Facilities	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Projects
Admin. Building(Harriett Tubman)	3.58	-	\$ 256,664	1948	1953, 1956
Admin. Building(Central Office)	45.48 shared	4	\$ 3,657,660	1980	
Old Bushy Park	12.00 shared	-	\$ 2,931,991	1976	1988(A), school replaced 2007
Faulkner Ridge Resource Center	9.01	-	\$ 750,174	1969	
Old Cedar Lane	11	-	\$ 3,839,731	1981	

Land Bank as of July 1, 2014

The Board maintains ownership and/or the rights to purchase parcels of land for future school sites, commonly known as the "Land Bank." The following schedules detail the current land in the Land Bank.

The Board currently owns the following properties and is holding them in a land bank for future school construction.

Owned Sites	Acreage	Location	Date Acquired	Cost
Sunny Spring Drive ¹	10	Sunny Spring Drive	1974	\$ 1
Future M.S. Site ²	41±	2865 Marriottsville Road	2007	\$ 1,700,000
Future School Site ³	8 ±	Banbury Dr. Parcel G	2013	\$ 4,200,000
Faulkner Ridge Center ¹	9.01	Marble Faun Lane	1968	\$ 1

The following properties are held by other parties for the future use by the Board of Education for school construction. Upon need for a school site, the Board may utilize these properties.

Reserved Sites	Acreage	Location
Clary's Forest	10±	Little Patuxent Parkway near Bright Passage
Dickinson	11±	Eden Brook Drive and Weather Worn Way
Dickinson	20±	Sweet Hours Way east of Eden Brook Drive
Harper's Choice	5±	Rivendell and Cedar Lane
Hopewell	10±	Rustling Leaf at Deepage Drive
Huntington	11±	Vollmerhausen Road east of Murray Hill Road

(1) Rouse sold the land to HCPSS for \$1

(2) The Future M.S. Site was acquired in a property swap with additional financial consideration for the Locust Park site (10 acres on Tamar Drive)

(3) The land developer paid \$4M toward the property, reducing the total cost to \$4.2M for HCPSS.



Recent Capital Accomplishments

HCPSS completed a number of impressive projects in the past year which provided urgently needed capacity and necessary renovations.

New Facilities

Ducketts Lane Elementary School

The Ducketts Lane ES was built to provide relief to crowded schools in the northeast region. The environmental sustainability features of the building are expected to attain a LEED gold rating. The building is central to the neighborhood and has already become a popular center for the community. Ducketts Lane ES is a feeder to Thomas Viaduct MS and will serve enrollment growth in advance of the opening of New ES #42.



Thomas Viaduct Middle School

The Thomas Viaduct MS was built to provide relief to crowded schools in the northeast region. The environmental sustainability features of the building are expected to attain a LEED silver rating. The building is central to a new community called Oxford Square which is built as a walking community with access to the MARC station. The entire community is planned to attain a LEED gold rating.

Renovated Facilities

Bollman Bridge Elementary School

The Bollman Bridge ES project completely renovated an existing one-story building, including the addition of a four-classroom pod and the replacement of a temporary modular addition housing four classrooms for the third grade teaching pod with a permanent structure. This investment is the first of two major school projects in the Savage area as this budget includes funding for Patuxent Valley Middle School.



Longfellow Elementary School

The Longfellow ES project renovated an existing single story facility originally constructed in 1970 and renovated in 1987. The primary focus was conversion of the open space teaching pods into individual classrooms. In addition, the administrative suite was relocated to the front entrance, and the health suite was developed to meet current standards. In providing this reconfiguration, a design direction was taken that improves the current use and flow of the building. Departing from the open pod concept, grade clusters are formed to maintain cohesion between the individual grade levels. To aid in the interior renovations of the school, several additions were built to relocate key programs within the building to free interior space.



Phelps Luck Elementary School Renovations



Phelps Luck Elementary School is a single story facility with a high volume space including a cafetorium and gymnasium. The original facility was constructed in 1971 with additions and renovations in 1989, 1998, and the most recent kindergarten addition in 2006. The school had up to eight temporary portable classrooms prior to the renovation. The primary focus of this project was to address the conversion of the open space teaching pods into individual classrooms. In addition to the conversion of the teaching pods, the entire roof on the original 1971 building was replaced, the administrative area was reconfigured, and the health suite was upgraded to current

standards. Open concept pods were replaced with enclosed classrooms and grade clusters were formed to maintain cohesion between the individual classrooms. To aid in the interior renovations of the school, several additions were built to relocate key programs.

Running Brook Elementary School Addition

The Running Brook ES project addressed the population growth of Columbia West region due to the redevelopment of the Columbia Mall into a high density mixed use community. To address this growth, the project provided at least 100 seats of additional classroom space by adding a two-story addition, cafetorium expansion and additional core infrastructure space necessary to operate effectively as a larger school. This expansion improved the utility and effectiveness of the existing academic support spaces.



Stevens Forest Elementary School Renovations

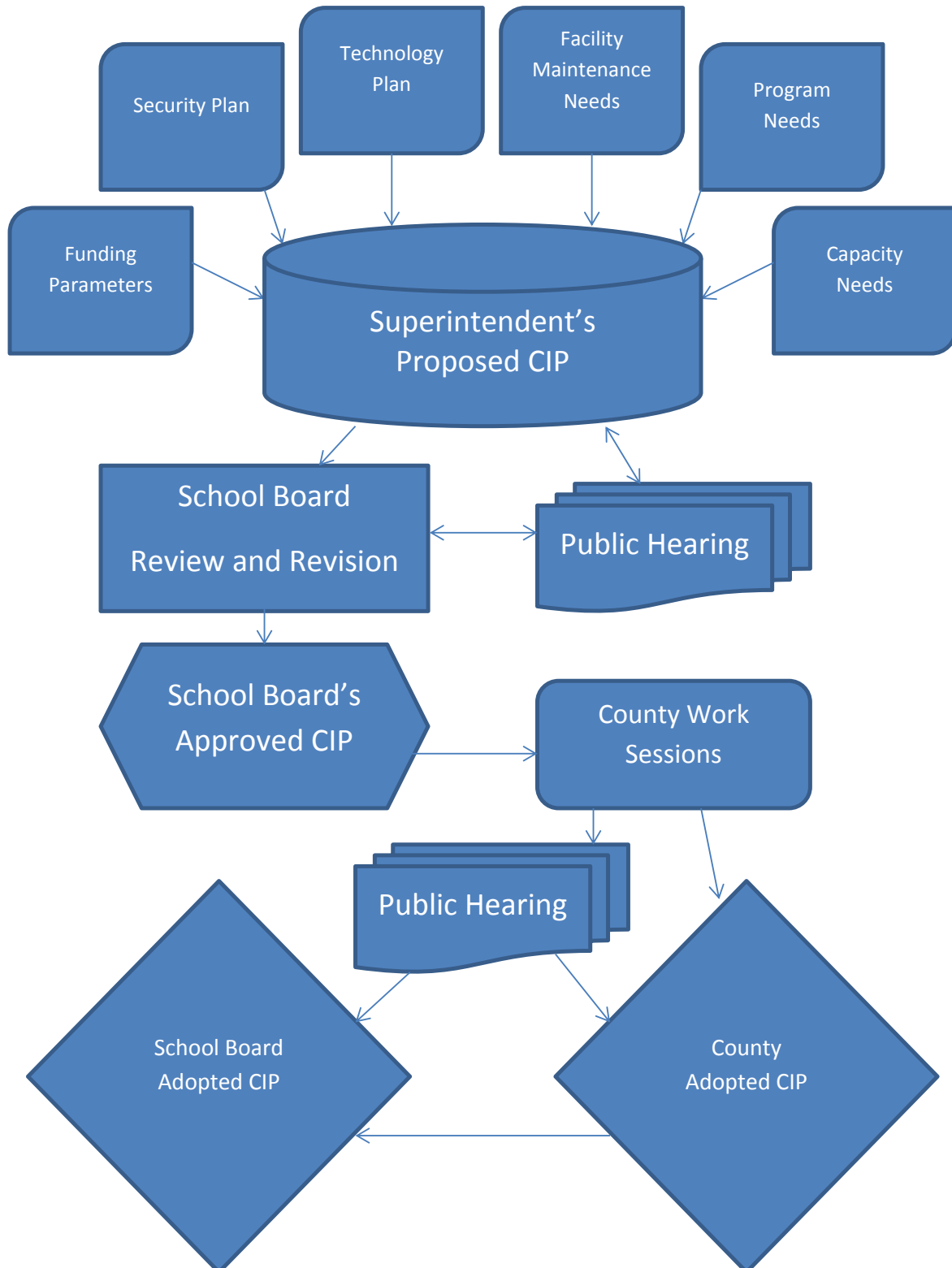
The Stevens Forest ES renovation included programmatic, systemic, and physical upgrades. The main objective was to enclose classrooms within the existing pod footprint and structural bearing walls. Additional programmatic changes included expanding the existing health suite and provision of adequate space for specialized and adjunct classrooms and support areas. Activities in portables were accommodated in the renovated building. Systemic upgrades included complete replacement of the mechanical system, new plumbing fixtures, upgraded electrical service, and new lighting. Energy efficient fixtures and systems are a highlight of the design. Physical upgrades included a roof replacement, refinished gym floor, new doors and hardware, additional exterior windows, new casework, and new finishes. Three additions accommodate program and building function.



Ducketts Lane ES includes an environmental study area that makes use of the storm water management pond on the school site.



Capital Improvement Program (CIP) Development Process



Calendar for Development and Review/Approval

FY 2016 Capital Budget

Capital Improvement Program FY 2017–2021

Long-Range Master Plan FY 2016–2025

Thursday, June 26, 2014 7:30 p.m. – Board Room	Staff presentation of Feasibility Study Report including 2014 enrollment projection.
Thursday, August 14, 2014 7:30 p.m. – Board Room	Board of Education Public Hearing and Pre-Development Work Session.
Thursday, September 11, 2014 7:30 p.m. – Board Room	Staff presentation of the Superintendent's Proposed Capital Budget.
Thursday, September 23, 2014 7:30 p.m. – Board Room	Board of Education Public Hearing on Superintendent's Proposed Capital Budget. Work Session and Approval of Superintendent's Proposed Capital Budget following the Public Hearing.
Monday, October 6, 2014	Board of Education submission of Proposed Capital Budget to Maryland Public School Construction Program.
TBD	Planning Board Public Hearing on Board of Education's Proposed Capital Budget.
TBD	County Council review of Board of Education's Proposed Capital Budget for letter of support to Interagency Committee on School Construction.
Thursday, February 24, 2015 9:00 a.m. – Board Room	Board of Education Adoption of the Requested Capital Budget.
TBD	Board of Education submission of the Requested Capital Budget to the County Executive and Budget Administrator.
TBD	County Executive Public Hearing on Capital Budget.
TBD	County Executive presentation of the Capital Budget.
TBD	County Council Public Hearing on the Education portion of the County Executive's Capital Budget.
Thursday, May 7, 2015 7:30 p.m. – Board Room	Board of Education Public Hearing.
TBD	Staff pre-file of the Adequate Public Facilities Ordinance Open/Closed Chart to County Council.
TBD	County Council Adoption of the Capital Budget.
Thursday, May 14, 2015 7:30 p.m. – Board Room	Board of Education Work Session (if necessary).
Tuesday, May 21, 2015 7:30 p.m. – Board Room	Board of Education Adoption of the Capital Budget.
TBD	County Council Adoption of Adequate Public Facilities Ordinance Open/Closed Chart.

TBD (to be determined) – Please check Howard County's website for schedule: <http://www.co.ho.md.us/>



Superintendent's Proposed
FY 2016 Capital Budget
Capital Improvement Program FY 2017–2021
Long-Range Master Plan FY 2016–2025

System Information

September 2014

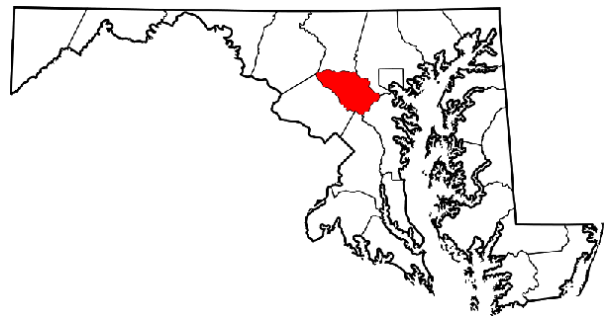


Howard County At A Glance

The Howard County Public School System (HCPSS) is among the nation's highest performing school districts, with the vast majority of students exceeding achievement standards and going on to higher education. The HCPSS has received national attention for providing a world-class education. The school system's excellence contributed to *CNN/Money* magazine ranking Columbia and Ellicott City #8 in the 2012 "Best Places to Live in America" list.

About Howard County

Howard County, Maryland is a suburban community of over 290,000, situated midway along the Baltimore-Washington corridor. It is a county of contrast—a blend of old and new, urban and rural, historical and progressive. The county's borders encompass Ellicott City, one of the country's oldest towns, and Columbia, a planned community conceived and designed over 40 years ago by the Rouse Company.



Howard County boasts a number of historical landmarks, including the Bollman Truss Railroad Bridge, the Thomas Viaduct, and nine sites along the Maryland Civil War trails.

The county's 30 regional and community parks, 7 golf courses, 5 lakes, and extensive hiking and biking trails also contribute to the \$590.1 million in annual tourism revenue.

Howard County Fast Facts

- 95.1% of the population over 25 has graduated high school. (MD State 88.5%)
- 59.5% hold a bachelor's degree or higher. (MD State 36.3%)
- \$107,821 is the median household income, 3rd highest in the country.
- 74.2% homeownership rate with median value of owner-occupied housing of \$435,300.
- 250.74 square miles land area and 1,144.9 persons per square mile. (MD State land area 9,707.24 square miles and 594.8 persons per square mile.) Howard County is smallest Maryland County by land area.
- 3.9% unemployment rate as of April 2014, lowest rate in Maryland. (MD State 5.3%)

Howard County Race/Ethnicity

	Howard County	Maryland
American Indian/Alaskan	0.4%	0.5%
Asian	15.7%	6.0%
Black/African American	18.1%	30.0%
Hawaiian/Pacific Islander	0.1%	0.1%
Hispanic/Latino	6.2%	8.7%
White	62.3%	60.8%
Two or More Races	3.4%	2.5%

2012 US Census Bureau Data

HCPSS Facilities At A Glance

The Howard County Public School System (HCPSS) maintains well over seven million square feet of school facilities and other buildings in service of delivering the educational program and for use by the community. The school system owns or controls approximately 1,827 acres of land. Approximately seven percent of HCPSS staff are devoted in some way to the maintenance of facilities.



HCPSS Facilities

76 schools

- 41 elementary schools
- 20 middle schools
- 12 high schools
- 3 special schools

Ancillary Facilities

- Ascend One (Lease ending 2014)
- Central Office
- Amberton Drive (Leased Storage)
- Dorsey Building (Shared Space)
- Faulkner Ridge (Vacant)
- Harriet Tubman (Offices and Shops)
- Ridge Road Center (Shops)
- Old Bushy Park (Storage)
- Old Cedar Lane (Offices)

Average CEFPI Rating*

Elementary	Middle	High
859	862	792

**Average score on 1,000 pt. scale based upon Council of Educational Facility Planners International Appraisal Guides*

Average Age of Facilities*

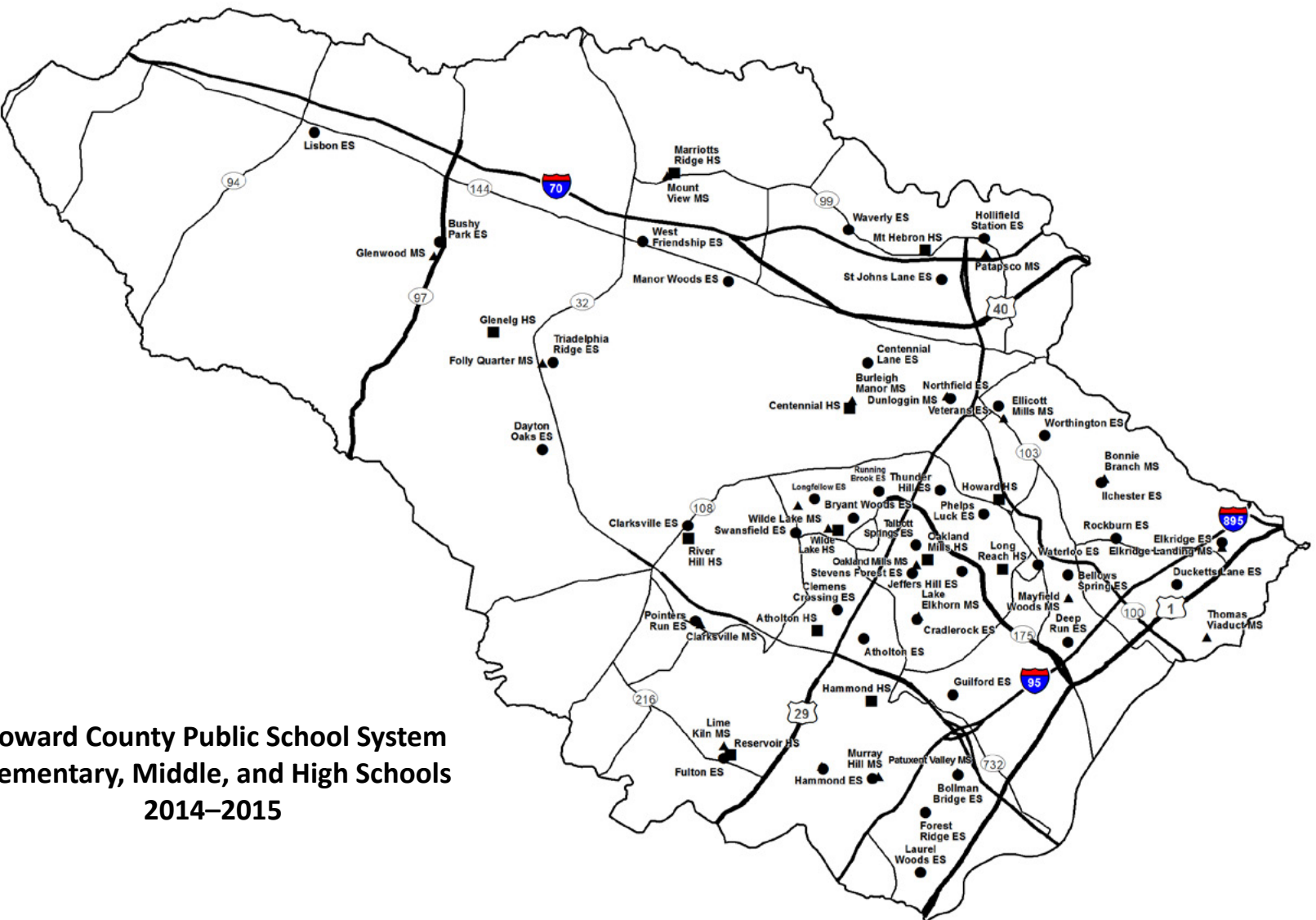
Elementary	Middle	High
13 years	15 years	16.5 years

**Including completed renovations*

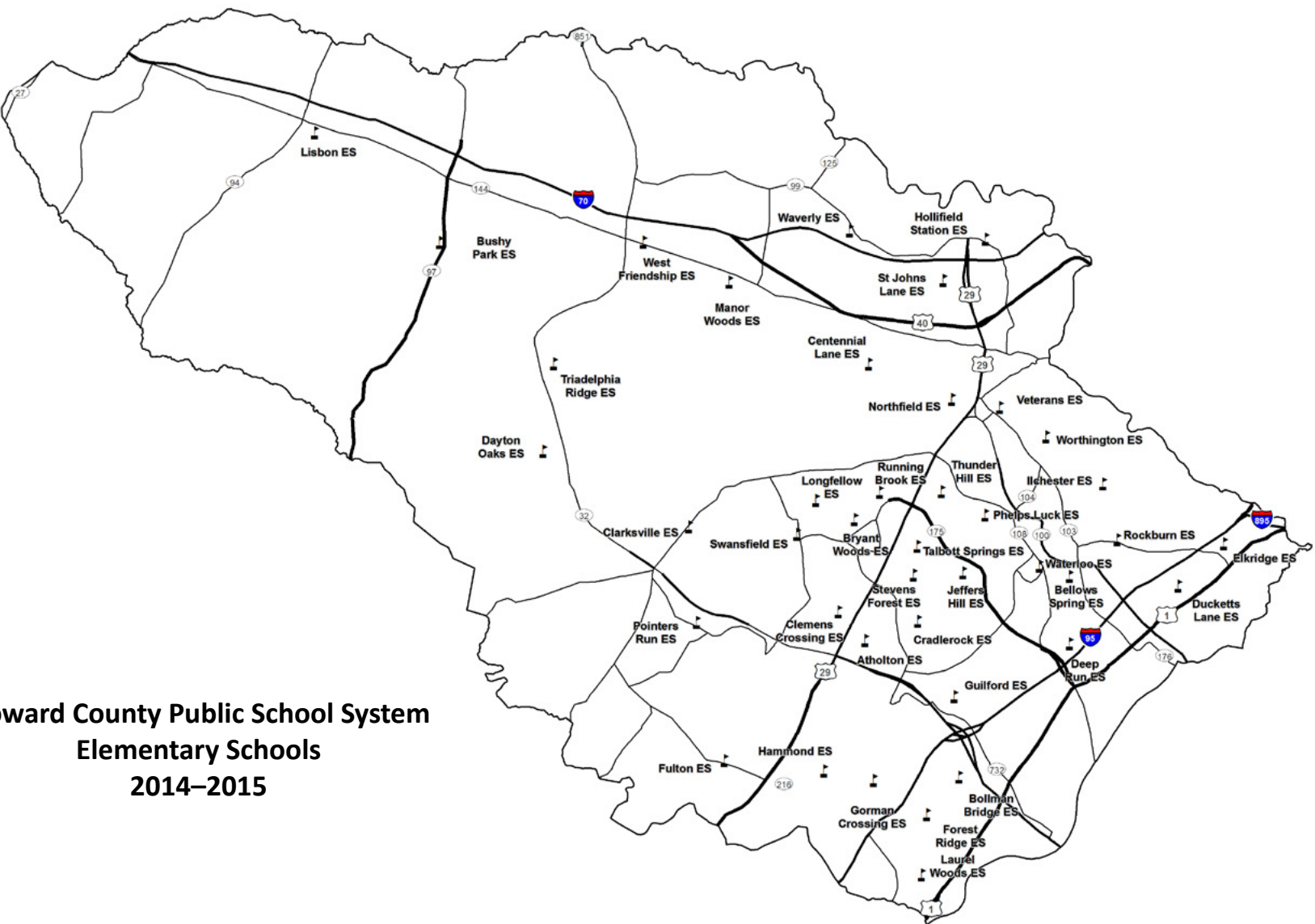
Enrollment*

Total Enrollment (Pre-K–12)	52,799
Elementary (Pre-K–5)	24,445
Middle (6–8)	11,890
High (9–12)	16,378
Special Schools	86

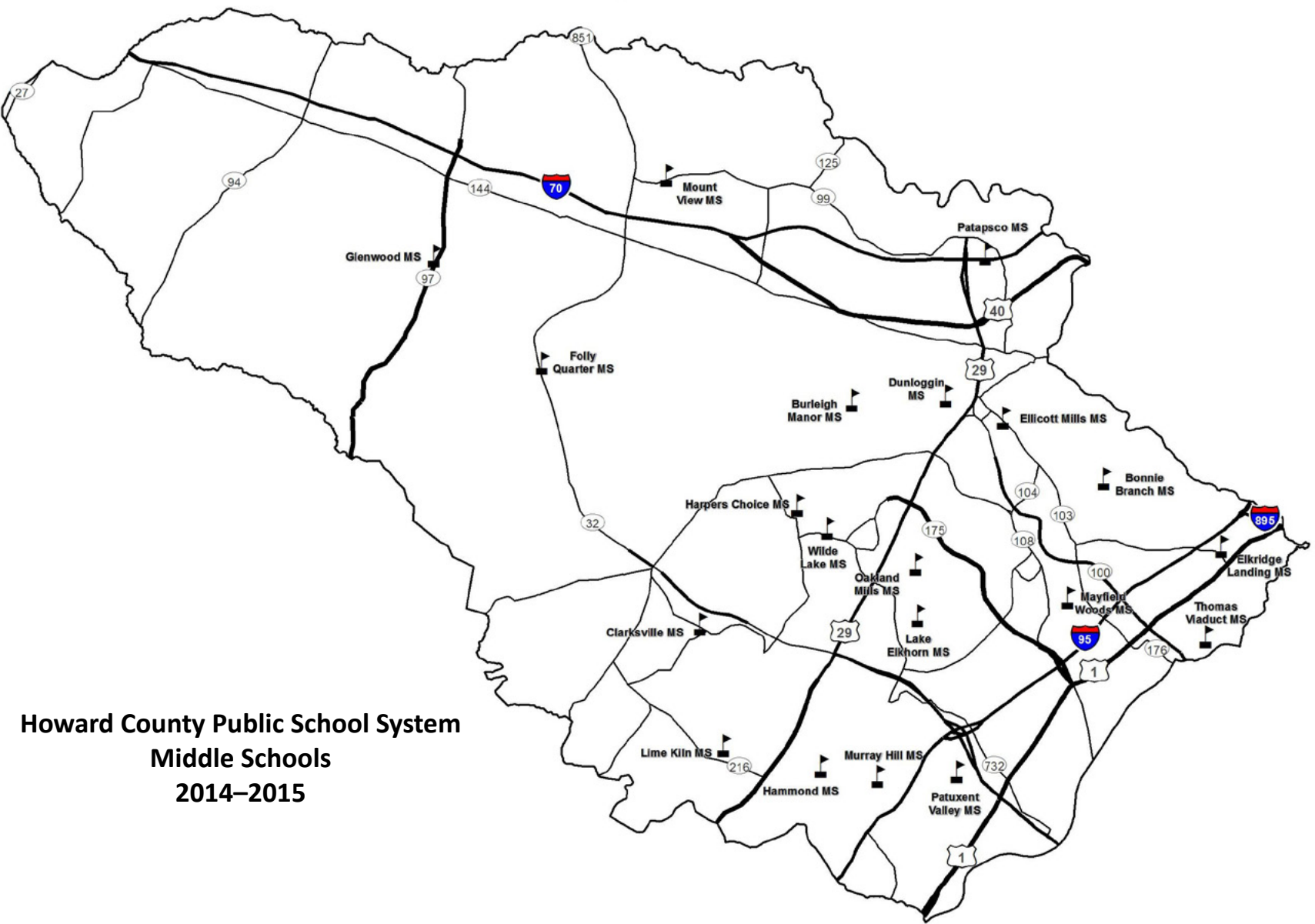
**Official September 30, 2013 Enrollment Report*



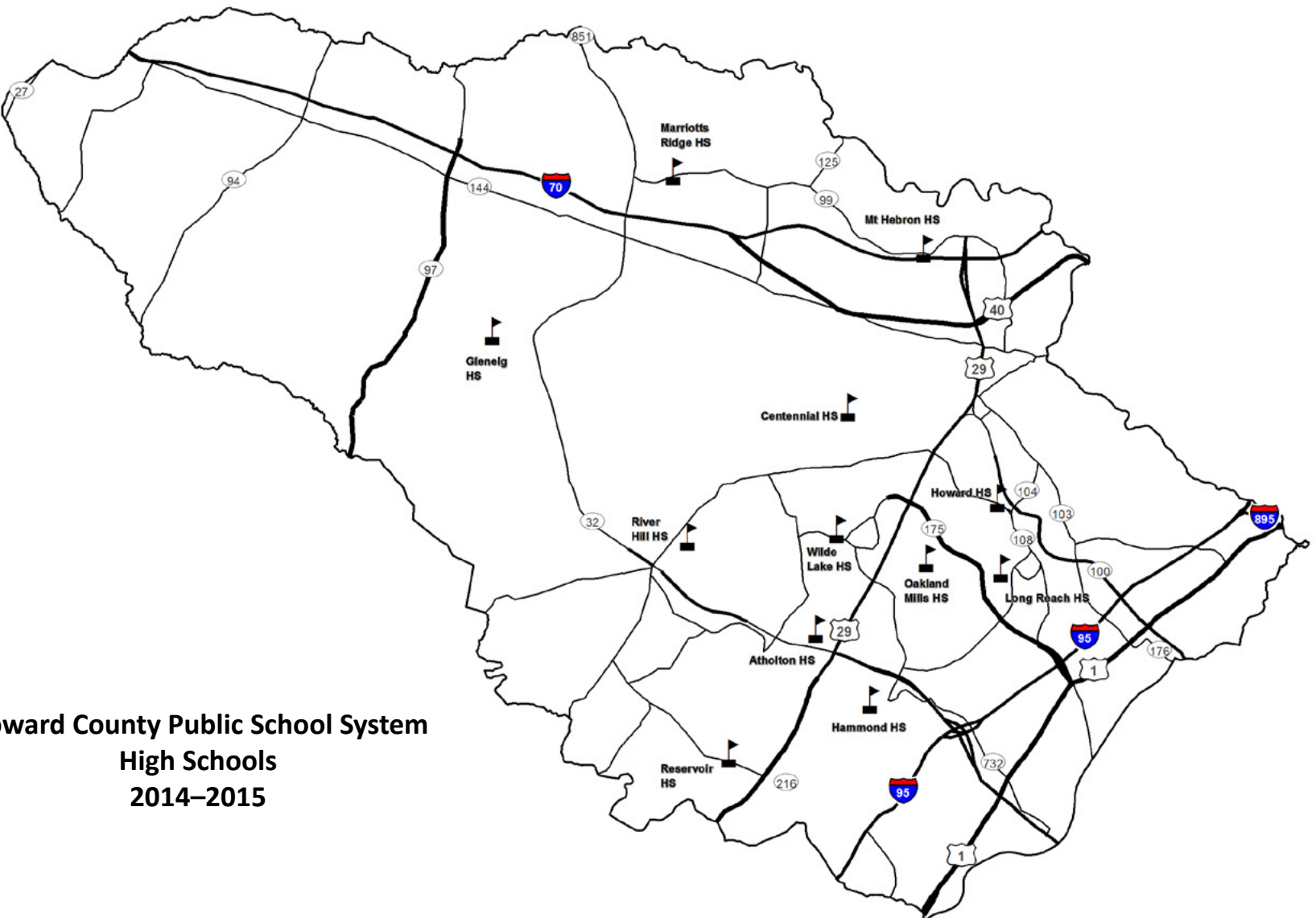
**Howard County Public School System
Elementary, Middle, and High Schools
2014-2015**



Howard County Public School System
Elementary Schools
2014-2015



**Howard County Public School System
Middle Schools
2014-2015**



**Howard County Public School System
High Schools
2014–2015**

Superintendent's Proposed
FY 2016 Capital Budget

Capital Improvement Program FY 2017–2021

Long-Range Master Plan FY 2016–2025

Project Detail

September 2014

Wilde Lake Middle School (Grades 6-8)

REPLACEMENT SCHOOL

Project 1031

10481 Cross Fox Lane, Columbia, MD 21044
<http://wlms.hcpss.org/>

Lisa Smithson, Principal
410-313-6957



Building Data

Year Built	1969
Age	45
Site Area (acres)	21
Last renovation/addition	1998
Current Relocatables	4
Current Capacity	467
9/30/13 Enrollment	546

Projections / Capacity Utilization

2014 Projection	541
Projected Utilization	116%
2019 Projection	741
Projected Utilization	159%
Post-renovation Cap.	702
Projected Utilization	106%

Project Purpose

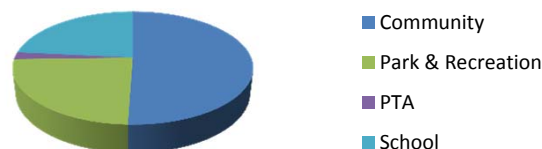
The Wilde Lake Middle School project will replace an aging middle school with a larger modern facility in an area slated for growth. The replacement school will provide capacity for 760 students. A 2008 facility assessment concluded that the WLMS building had a net program area deficiency of 13.6 percent, the largest deficiency of educational program area of the 19 middle schools operating at that time. A subsequent feasibility study determined that the cost of an Americans with Disabilities Act (ADA) compliant renovation was comparable to a replacement.

Nearly twice as large as the current school but using less than half the energy, the new facility will be a showcase of energy efficiency. Solar power will allow the net draw from the power grid over the course of a year to be zero. This kind of capital investment can defray operating expenses. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Wilde Lake Middle School

Over 1,900 reservations brought citizens and students into Wilde Lake MS after school hours and on weekends for a variety of community and student programs, meetings, activities and events. An attendance of 209,000 was recorded for these activities. Athletic events, after school activities, performance arts events and camps accounted for the majority of the facility use. Other uses, which include training, elections and other activities, make up the balance of reservations.

Community Use in FY14



Project Details

Wilde Lake Middle School, located in Columbia, was opened in 1969 as an open concept school and was expanded in 1974. In 1998, it was renovated with classrooms enclosed. During the summer of 2009, Wilde Lake MS went through minor renovations including some miscellaneous interior finishes and demountable partitions.

This building will be Net Zero and US Green Building Council (USGBC) LEED Certified. The building will be powered by solar voltaic cells on the roof. The architectural design is highly efficient considering building orientation, mass, and scale. Daylight is well used. The mechanical systems finely control electric lighting and HVAC and controls. Training will help school based staff make the most of energy efficient design. These considerations position the new Wilde Lake Middle School to be the most energy conscious and efficient school in the state.



School Location Map



Budget Summary

Approved Appropriations

FY 2014	Planning	\$	2,658
FY 2015	Construction		8,200

Current & Future Requests

FY 2016	Construction		18,234
FY 2017	Construction		12,895

Total Project Cost Estimate	\$	41,987
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This is the third year of funding for Wilde Lake Middle School. During FY 2016, the second year of construction will be implemented. The requested sum of \$18.2 million in FY 2016 will allow construction to progress on schedule. Based upon the current plan, the Board will request a final appropriation for this program in FY 2017 of \$12.9 million to complete work and have the replacement school ready to open in August 2017.



A net zero building generates the energy it uses over the course of a year.

Project Timeline

Task Phase	2014	2015	2016	2017
Feasibility Study	3m			
Planning and Design		12m		
Contract Bidding and Award			6m	
Construction			18m	
Close Out				2m

The above chart shows the calendar year timeline for planning and constructing for this project (in months). The Wilde Lake Middle School Replacement project is scheduled for completion in August of 2017.

Patuxent Valley Middle School (Grades 6-8)

RENOVATION

Project 1033

9151 Vollmerhausen Road, Jessup, MD 20794
<http://pvms.hcpss.org/>

Robert Motley, Principal
410-880-5840



Building Data

Year Built	1989
Age	25
Site Area (acres)	30
Last renovation/addition	N/A
Current Relocatables	6
Current Capacity	760
9/30/13 Enrollment	680

Projections / Capacity Utilization

2014 Projection	685
Projected Utilization	90%
2019 Projection	838
Projected Utilization	110%

Project Purpose

The Patuxent Valley Middle School project will expand educational program spaces and renovate the existing facility to remedy deficiencies in the design, particularly to improve operation and security. Open teaching stations will be reconfigured into self-contained classrooms. Operable walls will be replaced with full height drywall partitions. Modular classrooms will be replaced with permanent additions to the building that will accommodate the classroom spaces and necessary program areas.

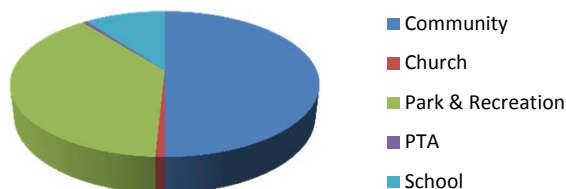
The project will include a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, sprinkler, technology, roofing, and life safety systems. Ceilings will be removed and replaced, toilet rooms will be renovated, and ADA accessibility will be addressed to bring the facility into compliance with the HCPSS Guidance Manual for Renovations and Modernizations of Existing Schools.

Patuxent Valley MS will be another USGBC LEED Certified school facility for Howard County. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Patuxent Valley Middle School

Over 852 community use reservations were registered for Patuxent Valley MS in FY 2014. An attendance of 40,310 was recorded for a variety of community and student programs, meetings, activities and events. Athletic events accounted for the majority of facility use. Other uses, which include after school activities and educational activities, make up the remaining reservations.

Community Use in FY14



Project Details

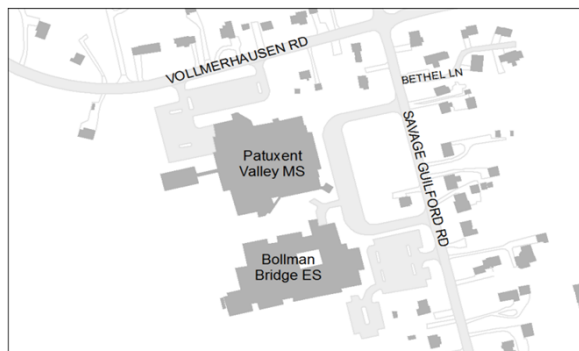
Patuxent Valley MS opened in 1989 with a group of six (6) modular classrooms connected to the building by a covered walkway sometime thereafter. No renovations to the 97,445 square foot school have occurred since the building was originally constructed.

The 2008 facility assessment of middle schools concluded that PVMS had a net 12.7% surplus of educational program area. While the net area meets specification, in 2013 Gilbert Architects found deficiencies in the design.

The systemic upgrades consist of a complete renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing, and life safety systems with an emphasis on energy efficiency. The physical upgrades include relocating the administration office to the main floor, repurposing the oversized library space, reconfiguring the cafeteria access to playground and bathrooms, and providing daylighting throughout the building. ADA improvements will include elevator access to the second floor from the main entrance lobby/stair tower and an upgrade to the Health Suite to present standards.



School Location Map



Budget Summary

Approved Appropriations

FY 2015	Planning	\$	8,145
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Current & Future Requests

FY 2016	Construction	10,300
FY 2017	Construction	10,085

Total Project Cost Estimate	\$	28,530
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This is the second year of funding for Patuxent Valley Middle School. During FY 2016, the first year of construction will be implemented. The requested sum of \$10.3 million in FY 2016 will allow construction to progress on schedule. Based upon the current plan, the Board will request a final appropriation for this program in FY 2017 of \$10.1 million to complete work by August 2017.

The view on the left shows the second floor administrative offices with an overlook on school operations. Renovation will move the administrative suite to the first floor with a secure vestibule for controlled egress to the building.

Project Timeline

Task Phase	2013	2014	2015	2016	2017
Feasibility Study	3m				
Planning and Design		12m			
Contract Bidding and Award			3m		
Construction				32m	
Close Out					2m

The above chart shows the calendar year timeline for planning and constructing for this project (in months). The Patuxent Valley Middle School Renovation project is scheduled for completion in August 2017.

Swansfield Elementary School (Grades K-5)

RENOVATION/ADDITION

Project 1034

5610 Cedar Lane, Columbia, MD 21044
<http://ses.hcpss.org/>

Molly Ketterer, Principal
410-313-6907



Building Data

Year Built	1972
Age	42
Site Area (acres)	10
Last renovation/addition	2008
Current Relocatables	4
Current Capacity	528
9/30/13 Enrollment	560

Projections / Capacity Utilization

2014 Projection	562
Projected Utilization	106%
2019 Projection	557
Projected Utilization	105%
Post-renovation Cap.	628
Projected Util. 2019	89%

Project Purpose

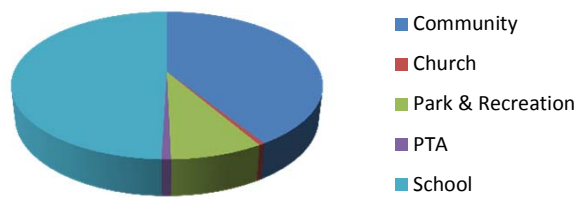
The Swansfield Elementary School project will expand educational program spaces with 100 seats of new capacity and renovate the existing facility. Swansfield Elementary School was opened in 1972 and renovated in 1998. The school was expanded in 1988 and 2008. In April 2009, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of elementary schools. The report concluded that Swansfield ES had 12.3 percent deficiency of educational program area of the 40 elementary schools operating at that time. The FY 2015 capital budget introduced this project to the Capital Improvement Program. In previous budgets, it was listed as a systemic renovation. In the FY 2015 Capital Budget, the total project cost was estimated at \$19.4 million. In the FY 2016 budget the total project cost estimate is \$25.1 million. The \$5.6 million increase is mainly attributed to the new plan including an addition.

The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Swansfield Elementary School

Over 2,900 reservations brought citizens and students into Swansfield ES after school hours and on weekends for a variety of community and student programs, meetings, activities and events. An attendance of 203,860 was recorded for these activities. After school activities and athletic events accounted for much of the facility use. Other uses, which include child care and camps, make up the remaining reservations.

Community Use in FY14



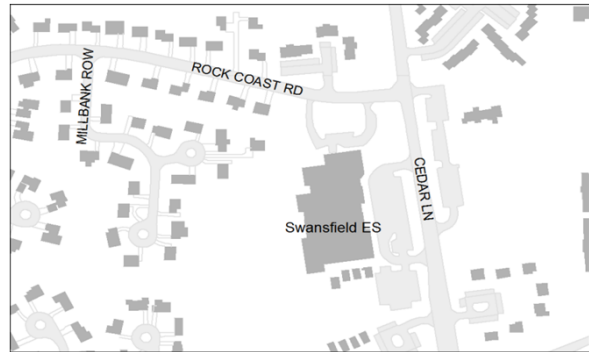
Project Details

The planned scope of work for the school includes programmatic, systemic, and physical upgrades as required bringing the facility into compliance with the Howard County Public School System Guidance Manual for Renovations and Modernizations of Existing Schools. The programmatic changes include providing individual classrooms and corridors, creating a COMAR compliant health suite, and providing adjunct space to relocate existing portable classrooms inside of the building.

The systemic upgrades consist of a complete renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing, and life safety systems with an emphasis on energy efficiency. The physical upgrades include a refinished gymnasium floor, new doors and hardware, additional exterior windows, as well as new casework and finishes. The project will provide additional capacity of 100 seats and core infrastructure space necessary to operate effectively at the larger capacity.



School Location Map



Budget Summary

Approved Appropriations

FY 2015	Planning	\$	1,898
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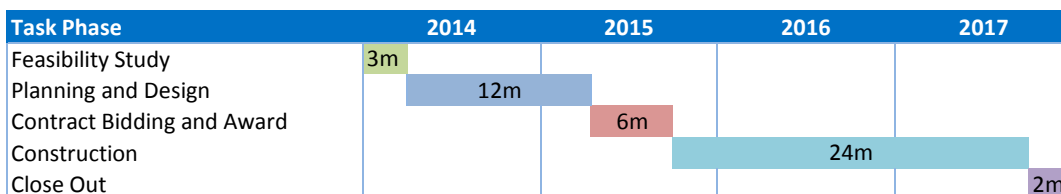
Current & Future Requests

FY 2016	Construction	12,361
FY 2017	Construction	10,832

Total Project Cost Estimate	\$	25,091
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This is the second year of funding for Swansfield Elementary School. During FY 2016, the first year of construction will be implemented. The requested sum of \$12.3 million in FY 2016 will allow construction to progress on schedule. Based upon the current plan, the Board will request a final \$10.8 million in FY 2017 to complete work and have the school ready by August 2017.

Project Timeline



The above chart shows the calendar year timeline for planning and constructing for this project (in months). The Swansfield Elementary School Renovation/Addition project is scheduled for completion in August 2017.

Waverly Elementary School (Grades K-5)

RENOVATION/ADDITION

Project 0973

10220 Wetherburn Road, Ellicott City, MD 21042
<http://waves.hcpss.org/>

Kathy Jacobs, Principal
410-313-2819



Building Data

Year Built	1990
Age	24
Site Area (acres)	11.49
Last renovation/addition	2007
Current Relocatables	3
Current Capacity	675
9/30/13 Enrollment	724

Projections / Capacity Utilization

2014 Projection	732
Projected Utilization	108%
2019 Projection	635
Projected Utilization	94%
Post-renovation Cap.	775
Projected Util. 2019	82%

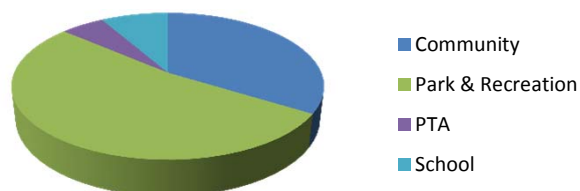
Project Purpose

The Waverly Elementary School project will expand educational program spaces with 100 seats of new capacity and renovate the existing facility. Waverly Elementary School opened in 1990 and was renovated in 2007 to accommodate full day kindergarten. The 2009 facility assessment of elementary schools concluded that Waverly ES had 14.6 percent deficiency of educational program area of the 40 elementary schools operating at that time. The FY 2015 Capital Budget introduced this project in the Capital Improvement Plan (CIP). In previous budgets, it was listed as a systemic renovation. In the FY 2015 capital budget, the total project cost was estimated at \$25.6 million. In the FY 2016 budget, the total project cost estimate is \$27.1 million. The \$1.7 million increase is mainly attributed to the new plan including an addition. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Waverly Elementary School

Waverly ES hosted over 1,620 after school and weekend activities for a variety of community and student programs, meetings, activities and events. An attendance of 91,297 was recorded for these activities. Athletic events accounted for approximately half of the facility use. Other uses, which include child care and after school activities make up the balance of reservations.

Community Use in FY14



Project Details

The project calls for an expansion of the educational program spaces and renovation of the existing facility. This will consist of a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing, and life safety systems as applicable per the recent feasibility assessment survey. The project will provide 100 seats of additional classroom space and core infrastructure space necessary to operate effectively at the larger capacity. Interior spaces will be reconfigured, new finishes provided, accessibility improved, and new spaces added as required bringing the facility into compliance renovation specifications.



The Waverly ES Addition supports a long term plan as described in the Feasibility Study. In 2015 and beyond, Manor Woods ES is projected to be above the 110 percent capacity utilization standard and eventually trends above 200 percent. Manor Woods ES is not on public sewer and for that reason expansion is unlikely. Constructing this addition in 2018 can help relieve overcrowding at Manor Woods ES. Beyond that, a new elementary school in Turf Valley that is sized to the current educational specifications is needed after 2020 and could serve as a replacement for West Friendship ES.

School Location Map



Budget Summary

Approved Appropriations

FY 2015	Planning*	\$	2,421
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Current & Future Requests

FY 2016	Construction	10,200
FY 2017	Construction	16,898

Total Project Cost Estimate	\$	27,098
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*Planning funds received in Systemic Renovation Project.

This is the second year of funding for Waverly Elementary School. Planning funds were received in the Systemic Renovation Line in FY 2015. During FY 2016, the first year of construction will be implemented. The requested sum of \$10.2 million in FY 2016 will allow construction to progress on schedule. In FY 2017, \$16.9 million is planned to complete work and have the school ready by August 2018.

Project Timeline

Task Phase	2015	2016	2017	2018
Feasibility Study	3m			
Planning and Design		12m		
Contract Bidding and Award			6m	
Construction			18m	
Close Out				2m

The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The Waverly Elementary School Renovation/Addition project is scheduled for completion in August 2018.

Oakland Mills Middle School (Grades 6-8)

LIMITED RENOVATION

Project 1036

9540 Kilimanjaro Road, Columbia, MD 21045
<http://omms.hcpss.org/>

Kathy Orlando, Principal
410-313-6937



Building Data	
Year Built	1972
Age	42
Site Area (acres)	20
Last renovation/addition	1998
Current Relocatables	0
Current Capacity	506
9/30/13 Enrollment	437

Projections / Capacity Utilization	
2014 Projection	462
Projected Utilization	91%
2019 Projection	518
Projected Utilization	102%

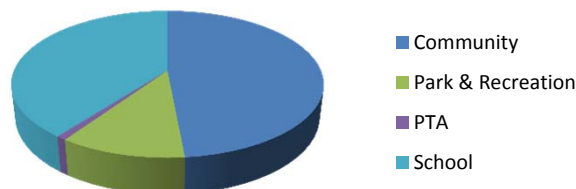
Project Purpose

The Oakland Mills Middle School project will renovate the existing facility. Oakland Mills Middle School opened in 1972 and was renovated in 1998. In August 2008, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of middle schools. This project evaluated and scored each school according to the Council of Educational Facilities Planners, International (CEFPI) appraisal guidelines. The assessment included reviewing each school's plan layouts and measurements of spaces to compare to the educational specifications developed by HCPSS for middle schools. The report concluded that Oakland Mills MS had 8.8 percent deficiency of educational program area of the 19 middle schools operating at that time. The FY 2016 capital budget introduces this project to the Capital Improvement Plan. In previous budgets, it was listed as a systemic renovation. In the FY 2015 capital budget the total project cost was estimated at \$26 million. In the FY 2016 budget the total project cost estimate is \$14 million. The \$12 million decrease is attributed to the decision to scope this project as a limited renovation. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Oakland Mills Middle School

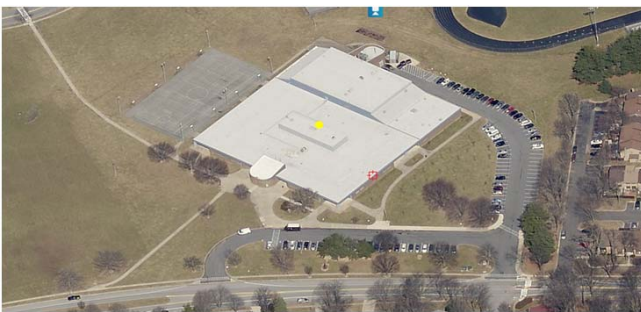
Citizens and students spent nearly 4,000 hours at Oakland Mills MS after school hours and on weekends for a variety of community and student programs, meetings, activities and events. An attendance of 48,472 was recorded for these activities. Athletic events accounted for approximately half of the facility use. After school activities and child care are included in the remaining reservations.

Community Use in FY14

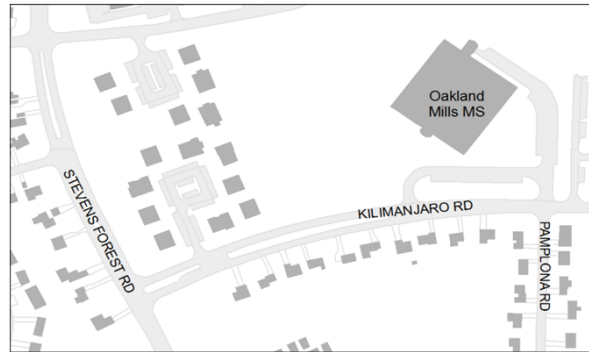


Project Details

The project calls for a limited renovation the existing building in accord with recommendations of a future feasibility study or scope of work review. Renovation may include new electrical, mechanical, plumbing, technology, roofing, and life safety systems as applicable per the scope of work. Some Interior spaces will be reconfigured, new finishes provided, accessibility improved, and new spaces added as required bringing the facility into compliance with the Howard County Public School System Guidance Manual for Renovations and Modernizations of Existing Schools.



School Location Map



Budget Summary

Approved Appropriations

FY 2015	Planning*	\$	2,300
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Current & Future Requests

FY 2016	Construction	4,000
FY 2017	Construction	5,000
FY 2018	Construction	5,000

Total Project Cost Estimate	\$	14,000
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*Planning funds received in Systemic Renovation Project.

This is the second year of funding for Oakland Mills Middle School. Planning funds were received in the Systemic Renovation Line in FY 2015. During FY 2016, the first year of construction will be implemented. The requested sum of \$14 million in FY 2016 through FY 2018 will allow construction to progress on schedule and work to be completed by August 2018.

Project Timeline

Task Phase	2015	2016	2017	2018
Feasibility Study	3m			
Planning and Design		12m		
Contract Bidding and Award		6m		
Construction			18m	
Close Out				2m

The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The Oakland Mills Middle School Limited Renovation project is scheduled for completion in August 2018.

New Elementary School #42 (Grades K-5)

NEW SCHOOL

Project 1028

School Site potentially located adjacent to Thomas Viaduct Middle School at
7000 Banbury Drive, Hanover, MD



Architect rendering of Ducketts Lane Elementary School courtesy of Grimm + Parker Architects. This is the newest HCPSS elementary school based on the current education specifications.

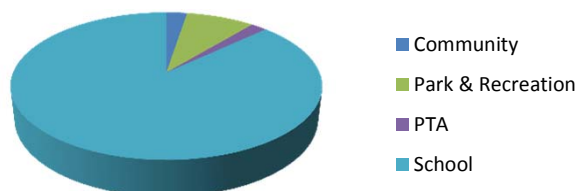
Project Purpose

The New Elementary School #42 will be a new facility. Capacity utilization at Ducketts Lane ES, which opened in August 2013, in the northern Route 1 corridor, will continue to grow. Even with additional capacity that may have been found in the Gilbert study, we have known that at least one additional elementary school is needed in the eastern part of the county. The region will exceed 115 percent utilization in 2018 and require close to 1,000 additional seats. The recently completed comprehensive zoning increased the entire housing projection this year by 996 units, most of which was in the East. This capital budget recommends completion of Elementary School #42 in 2019 as was shown in the FY 2015 Capital Budget. Planning is initiated in FY 2016. If high enrollment continues, adjustments can be made to this capital budget or the FY 2017 Capital Budget. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at neighbor school Ducketts Lane Elementary School

Community use is anticipated in the planning for this new facility. Ducketts Lane ES serves as a comparison. Ducketts Lane hosted 87,917 attendees for over 3,394 reservations after school hours and on weekends for a variety of events. The majority of the events were school related, and remaining reservations were Park and Recreation and other community events.

Community Use in FY14



Project Details

The New Elementary School #42 will be designed in conformance with the General Educational Specifications for New Elementary Schools published in February 2010. The building design will provide the best possible learning environment for all elementary students in every aspect of educational program by providing inclusive learning spaces, state-of-the art technology, and sustainable building practices. The prototype is a two-story elementary school designed for a 600 student capacity. The new school will accommodate prekindergarten through fifth grade, as well as the Regional Early Childhood Center. The project will achieve USGBC LEED Gold certification in keeping with the sustainable goals of HCPSS to reduce negative impact on the environment and enhance health and comfort of the building occupants, thereby improving building performance.



Budget Summary

Current & Future Requests

FY 2016	Planning	\$	2,807
FY 2017	Construction		11,640
FY 2018	Construction		23,633
FY 2019	Construction		2,460

Total Project Cost Estimate	\$	40,540
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A school site is located adjacent to Thomas Viaduct Middle School at 7000 Banbury Drive, Hanover, MD.



Transit-oriented developments (TOD) are densely arranged communities of homes, offices, and stores near a rail station or bus line. Oxford Square situated very close to the Dorsey Marc station and will have a community shuttle until a pedestrian access can be constructed.

Project Timeline

Task Phase	2016	2017	2018	2019
Feasibility Study	3m			
Planning and Design		12m		
Contract Bidding and Award			6m	
Construction			18m	
Close Out				2m

The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The New Elementary School #42 project is scheduled for opening in August 2019.

Hammond High School (Grades 9-12)

RENOVATION

Project 1024

8800 Guilford Road, Columbia, MD 21046
<http://hammondhs.org/>

Marcy Leonard, Principal
410-313-7615



Project Purpose

The Hammond High School project will renovate the existing school. Hammond High School is a one story building that first opened in 1976 and underwent some miscellaneous renovation and addition work in 1997, followed by a dance studio addition in 2011. The present need is a complete renovation of the school with systemic upgrades to bring it into compliance with the Howard County Public School Systems Guidelines Manual for Renovations and Modernizations of Existing Schools. The capacity of the school will remain unchanged upon completion of the proposed project. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Building Data

Year Built	1976
Age	38
Site Area (acres)	33.14
Last renovation/addition	2011
Current Relocatables	4
Current Capacity	1,220
9/30/13 Enrollment	1,256

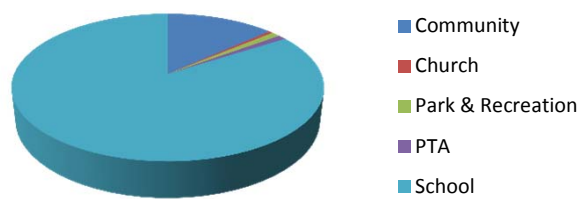
Projections / Capacity Utilization

2014 Projection	1,270
Projected Utilization	104%
2019 Projection	1,601
Projected Utilization	131%

Community Use at Hammond High School

An attendance of 215,000 was recorded for over 3,900 reservations at Hammond HS outside of school hours for events. Most after school activities at any high school are school related including after school programming, athletic activities, educational activities and performing arts.

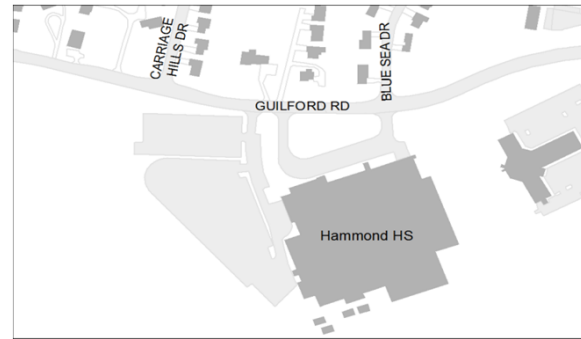
Community Use in FY14



Project Details

The project will consist of a complete systemic renovation of the school that will replace the aging heating and cooling systems, upgrade the plumbing and electrical systems, supply new data technology and security systems, provide new interior finishes throughout the building, create ADA accessibility compliance throughout, and repartition select areas of the school and construct building additions as necessary to fulfill program deficiencies. It is also the intent to concentrate on energy efficient systems and sustainable practices building thus yielding another USGBC LEED certified facility.

School Location Map



Budget Summary

Current & Future Requests

FY 2016	Planning	\$	3,790
FY 2017	Construction		18,124
FY 2018	Construction		18,999
FY 2019	Construction		18,374
FY 2020	Construction		19,000

Total Project Cost Estimate	\$	78,287
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This is the first year of funding for Hammond High School. During FY 2016, the first year of planning will be implemented. The requested sum of \$3.8 million in FY 2016 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program in FY 2017 through FY 2020 totaling \$74.5 million to complete work and have the school ready by August 2020.

Project Timeline

Task Phase	2016	2017	2018	2019	2020
Feasibility Study	3m				
Planning and Design	12m				
Contract Bidding and Award		6m			
Construction			36m		
Close Out					2m

The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The Hammond High School Renovation project is scheduled for completion in August 2020.

Ellicott Mills Middle School (Grades 6-8)

ADDITION

Project 1037

4445 Montgomery Road, Ellicott City, MD 21043
<http://emms.hcpss.org/>

Christopher Rattay, Principal
410-313-2839



Building Data

Year Built	1939
Age	75
Site Area (acres)	16.22
Replacement school	2001
Current Relocatables	3
Current Capacity	662
9/30/13 Enrollment	774

Projections / Capacity Utilization

2014 Projection	737
Projected Utilization	111%
2019 Projection	883
Projected Utilization	133%
Post-renovation Cap.	818
Projected Util. 2019	108%

Project Purpose

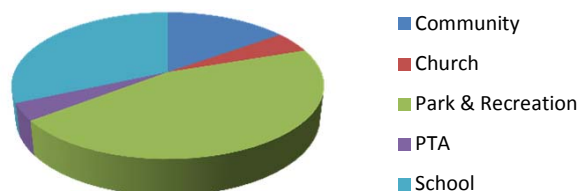
The Ellicott Mills Middle School project will add 156 seats of new capacity to the existing school. Ellicott Mills Middle School is the third iteration of the current middle school prototype and opened in 2001. The projections in the June 2014 Feasibility Study support the approved middle school capacity adjustments and the effort invested in redistricting. All middle schools in the Northeast were relieved of overcrowding by the opening of Thomas Viaduct MS, except Ellicott Mills MS. Redistricting scenarios using western capacity failed to resolve crowding and created unacceptable travel distances and unusually elongated attending areas. With these findings, planned expansion of Ellicott Mills MS was contemplated in the Feasibility Study. This project is a next logical step after study of middle school capacity and analysis of redistricting scenarios.

The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Ellicott Mills Middle School

Over 4,569 reservations brought citizens and students into Ellicott Mills MS after school hours and on weekends for a variety of community and student programs, meetings, activities and events. An attendance of nearly 550,000 was recorded for these activities. Athletic events and child care accounted for approximately half of the facility use. Other uses, which include after school activities and performing arts make up the remaining reservations.

Community Use in FY14

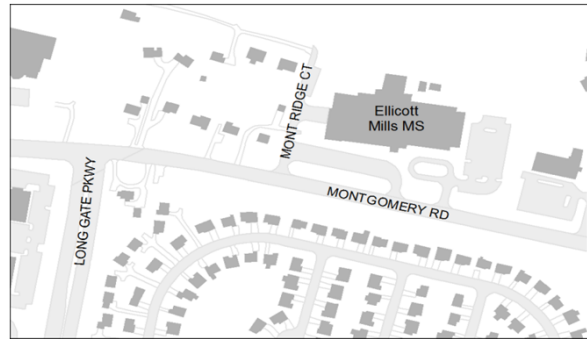


Project Details

This project will include an addition and light renovation to ensure seamless operation of the expanded facility. The majority of existing walls will remain; therefore, most existing classrooms will remain as classrooms, though they will receive new finishes, cabinetry, doors, data, electrical and mechanical systems. The addition will be designed to retain use natural daylight. The cafeteria will be enlarged to meet educational program requirements. The mechanical system will likely utilize geothermal technology. The school should achieve USGBC LEED Certified certification.



School Location Map



Budget Summary

Current & Future Requests

FY 2017	Planning	\$	432
FY 2018	Construction		3,440
FY 2019	Construction		2,293

Total Project Cost Estimate	\$	6,165
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FY 2017 will be the first year of funding for Ellicott Mills Middle School. During FY 2017, the first year of planning will be implemented. The requested sum of \$432 thousand in FY 2017 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program in FY 2018 and FY 2019 totaling \$5.7 million to complete work and have the school ready by August 2019.

Project Timeline

Task Phase	2017	2018	2019
Feasibility Study	3m		
Planning and Design	12m		
Contract Bidding and Award		6m	
Construction		12m	
Close Out			2m

The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The Ellicott Mills Middle School Addition project is scheduled for completion in August 2019.

Oakland Mills High School (Grades 9-12)

RENOVATION

Project 1029

9410 Kilimanjaro Road, Columbia, MD 21045
<http://www2.hcpss.org/omhs/>

Karim Shortridge, Principal
410-313-6945



Project Purpose

The Oakland Mills High School project will renovate the existing school. Oakland Mills High School is a two story building that opened in 1973 and underwent some miscellaneous renovation and addition work in 1991, 1992, and 2004. The present need is a complete renovation of the school with systemic upgrades to bring into compliance with the Howard County Public School Systems Guidelines Manual for Renovations and Modernizations of Existing Schools. The capacity of the school will remain unchanged upon completion of the proposed project. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Building Data

Year Built	1973
Age	41
Site Area (acres)	28.6
Last renovation/addition	2004
Current Relocatables	0
Current Capacity	1,400
9/30/13 Enrollment	1,128

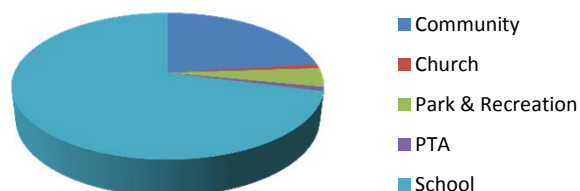
Projections / Capacity Utilization

2014 Projection	1,151
Projected Utilization	82%
2019 Projection	1,355
Projected Utilization	97%

Community Use at Oakland Mills High School

Over 4,261 reservations brought citizens and students into Oakland Mills HS after school hours and over the weekends for a variety of community and student programs, meetings, activities and events. An attendance of 363,492 was recorded for these activities. After school use of high schools is primarily school related activities. Other uses, which include church, after school activities, recreation and parks, community programs and PTA make up the remaining reservations.

Community Use in FY14



Project Details

The project will consist of a complete systemic renovation of the school that will replace the aging heating and cooling systems, upgrade the plumbing and electrical systems, supply new data technology and security systems, provide new interior finishes throughout the building, create ADA accessibility compliance throughout, and repartition select areas of the school and construct building additions as necessary to fulfill program deficiencies. It is also the intent to concentrate on energy efficient systems and sustainable practices building thus yielding another USGBC LEED certified facility.

School Location Map



Budget Summary

Current & Future Requests

FY 2020	Planning	\$	6,167
FY 2021	Construction		38,685
FY 2022	Construction		25,790

Total Project Cost Estimate	\$	70,642
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FY 2020 will be the first year of funding for Oakland Mills High School. During FY 2020, the first year of planning will be implemented. The requested sum of \$6.2 million in FY 2020 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program in FY 2021 and FY 2022 totaling \$64.5 million to complete work by August 2022.

Project Timeline

Task Phase	2018	2019	2020	2021	2022
Feasibility Study	3m				
Planning and Design	12m				
Contract Bidding and Award		6m			
Construction			36m		
Close Out					2m

The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The Oakland Mills High School Renovation project is scheduled for completion in August 2022.

Centennial High School (Grades 9-12)

RENOVATION

Project 1025

4300 Centennial Lane, Ellicott City, MD 21042
<http://www.centennialeagles.org/>

Claire Hafets, Principal
410-313-2856



Building Data

Year Built	1977
Age	37
Site Area (acres)	43
Last renovation/addition	2011
Current Relocatables	4
Current Capacity	1,360
9/30/13 Enrollment	1,370

Projections / Capacity Utilization

2014 Projection	1,376
Projected Utilization	101%
2019 Projection	1,651
Projected Utilization	121%

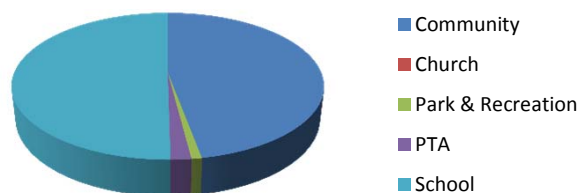
Project Purpose

The Centennial High School project will renovate the existing school. Centennial High School is a one-story building that opened in 1977 and had an addition completed in 2002, followed by a dance studio addition in 2011. The present need is a complete renovation of the school with systemic upgrades to bring into compliance with the Howard County Public School Systems Guidelines Manual for Renovations and Modernizations of Existing Schools. The capacity of the school will remain unchanged upon completion of the proposed project. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Centennial High School

Over 5,613 reservations brought citizens and students into Centennial HS after school hours and on weekends for a variety of community and student programs, meetings, activities and events. An attendance of 604,529 was recorded for these activities. After school use of high schools is primarily school related activities like athletic and performance arts events. Other uses, which include training, elections and other activities make up the remaining 45 percent.

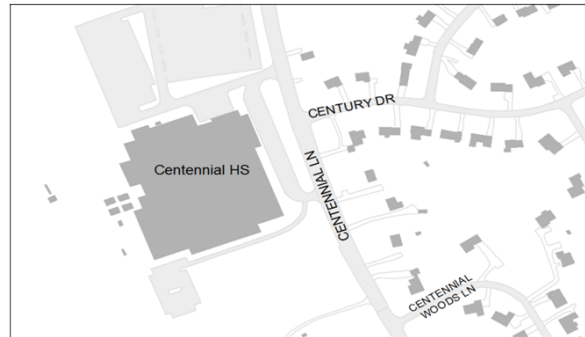
Community Use in FY14



Project Details

The project will consist of a complete systemic renovation of the school that will replace the aging heating and cooling systems, upgrade the plumbing and electrical systems, supply new data technology and security systems, provide new interior finishes throughout the building, create ADA accessibility compliance throughout, and repartition select areas of the school and construct building additions as necessary to fulfill program deficiencies. It is also the intent to concentrate on energy efficient systems and sustainable practices building thus yielding another USGBC LEED certified facility.

School Location Map



Budget Summary

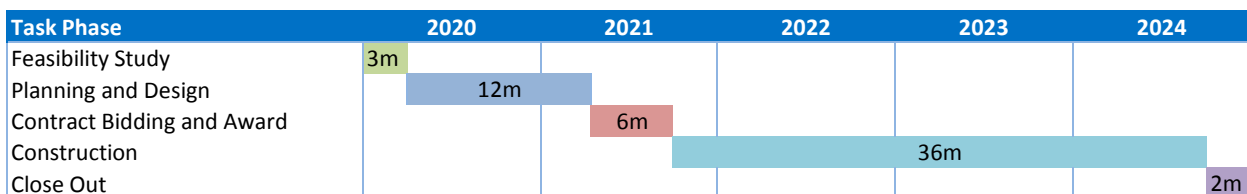
Current & Future Requests

FY 2022	Planning	\$	6,151
FY 2023	Construction		38,592
FY 2024	Construction		25,728

Total Project Cost Estimate	\$	70,471
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FY 2022 will be the first year of funding for Centennial High School. During FY 2022, the first year of planning will be implemented. The requested sum of \$6.2 million in FY 2022 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program in FY 2023 and FY 2024 totaling \$64.3 million to complete work in the school by August 2024.

Project Timeline



The above chart shows the anticipated calendar year timeline for planning and constructing for this project (in months). The Centennial High School Renovation project is scheduled for completion in August 2024.

Long Range Plan Adjustments (Grades K-12)

NEW SCHOOLS

Sites to be determined



Architect rendering of Marriotts Ridge High School courtesy of TCA Architects. This is the newest HCPSS high school based on the current education specifications.

Responding to the 2014 Feasibility Study

Planning and zoning changes require changes to the CIP. While the HCPSS is peripheral to land development discussions, land planning decisions impact school system capital improvement plans. Staff continues to work closely with the Department of Planning and Zoning and Public Works staff to ensure that schools are central to new development. The annual Feasibility Study analyzes these trends and proposes adjustments to the CIP. The projections indicate that the FY 16-25 long range plan requires three more elementary schools and one additional middle school. Previous budgets have introduced ES 42 and HS 13. Ensuring that all of these needs are addressed will probably require a new source of local revenue.

Elementary School Needs

Elementary enrollment is projected to increase by 3,912 students by 2023 and the capacity utilization of all elementary schools combined will begin to exceed 110 percent by 2020. This is earlier than previous projections and suggests more elementary capacity is needed in the long-range capital improvement plan. The three areas which will experience the greatest growth over the next five to ten years will be the Route 1 Corridor, Columbia Town Center, and Turf Valley.

ES 43 – Southeastern ES - 1039

The recently completed comprehensive zoning increased the entire housing projection this year by 996 units, most of which was in the East. ES 42 will be built in the Northeast region at Oxford Square. The needs of the southeast region are evident in the projections of Bollman Bridge ES and Forest Ridge ES. The location of ES 43 is to be determined. A location in close proximity to the planned Transit Oriented Development is desirable.



Artist rendering of the redevelopment of Columbia Town Center. The Columbia Town Center report anticipated future needs as a result of this project

ES 44 - Columbia West ES - 1040

Running Brook ES (with expansion) is expected to exceed 110 percent utilization by 2016. A redistricting strategy alone, which uses nearby schools like Clarksville ES will not provide an adequate solution to accommodate the projected growth. Faulkner Ridge Center was closed on July 1, 2011. This site is a likely location for redevelopment as a future school.

ES 45 - Turf Valley ES - 1041

Projections continue to support the need for elementary redistricting to relieve overcrowding at Manor Woods ES associated with Turf Valley growth. The addition at Waverly ES can absorb some growth. Considering the limited potential for expanding schools outside of the sewer service area, a Turf Valley school planned. Land is being acquired for this future school.

Middle School Needs

MS 21 - 1042

The opening of Thomas Viaduct MS in the 2014-2015 school year is a tangible reminder that growth is impacting middle school capacities as well. By 2025, three of five middle schools in Northeast region will have significant overcrowding. The same will be true for all three Southeastern region middle schools. Site acquisition efforts are underway.

High School Needs

HS 13 - 1035

Howard HS is experiencing overcrowding. The capacity needs are also projected for Long Reach HS and Hammond HS. A small amount of capacity at Oakland Mills HS is not sufficient to balance these needs. Interim measures are under consideration but the trends eventually point to a new high school. This capital budget recommends completion of HS #13 in 2026 as was shown in the FY 2015 Capital Budget.

Systemic Renovations

RENOVATIONS and ADDITIONS

Project 0980

Various locations



Boiler room at Mount View Middle School.

The Department of School Facilities is charged with maintaining the facilities and grounds of the Howard County Public School System (HCPSS) in as near original condition and effectiveness as possible. Actual costs incurred in the Systemic Renovations Project over the past five years is below.

Systemic Renovations Actual Expenses		
Fiscal Year	Actual Expense	
FY 2010	\$	14,536,145
FY 2011	\$	16,533,132
FY 2012	\$	25,048,690
FY 2013	\$	21,798,947
FY 2014	\$	15,593,468

Project Purpose

The systemic renovation project will include projects that are needed to bring older facilities up to current standards in lighting, electrical, HVAC systems, reconfiguring space, handicap accessible improvements, and provide for upgrades to other building systems. For larger systemic renovation projects (see schools listed in project details section), the complete scope of projects are defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

FY 2016 Request Analysis

Project Funding (July 1, 2003 - June 30, 2015)	\$	218,887,000
Project Cost-to-Date (through June 30, 2014)		(191,590,971)
FY 2015 Projected Costs		(20,214,667)
Available Project Funding (July 1, 2015)	\$	7,081,362
Requested Budget FY 2016	\$	9,263,000



Construction of partition walls.

Project Details

Systemic renovation projects include improvements and installation of systemic renovations at various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, and window replacement. The department publishes an annual Comprehensive Maintenance Program which reflects the objectives and methods utilized to provide a safe and secure learning environment for Howard County's school community as required by the Public School Construction Regulations. This document has been consulted in the development of this budget for potential systemic projects.

The FY 2016 Capital Budget request represents renovation work or planning for future construction at the following school facilities:

Hollifield Station ES HVAC
Mayfield Woods MS Electronics (Fire Alarm)
Manor Woods ES Electronics (Fire Alarm)
Lime Kiln MS HVAC
Clarksville ES Doors/Frames
Rockburn ES Boiler
Glenwood MS Boiler/Water Heater
Bonnie Branch MS HVAC



Roofing Projects

Project 0994



Roof repairs at Burleigh Manor MS.

The Facilities Department oversees the Roofing Project and provides maintenance and repairs for all HCPSS facilities. Actual costs incurred in the Roofing Project over the past five years is below.

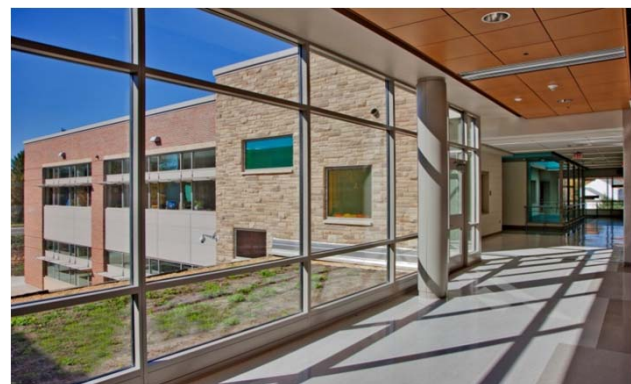
Roofing Projects Actual Expenses		
Fiscal Year	Actual Expense	
FY 2010	\$	4,083,349
FY 2011	\$	5,339,927
FY 2012	\$	4,841,087
FY 2013	\$	3,093,044
FY 2014	\$	5,468,035

Project Purpose

The roofing project will address aging roofs on various Howard County Public School System schools. A well planned roofing program is critical to all other systems in a capital facility. When roofing systems wear the damage can impact other systems and multiply costs. Roof planning is more than shingles and asphalt. Modern roofing systems are actually complex investments built to exacting specifications. HCPSS regularly inspects roofing systems and provides reports to the State of Maryland. Planning and project execution must balance system warranties, state funding eligibility and the risk of maintenance deferral.

FY 2016 Request Analysis

Project Funding (July 1, 2003 - June 30, 2015)	\$	40,537,000
Project Cost-to-Date (through June 30, 2014)		(32,363,500)
FY 2015 Projected Costs		(7,067,957)
Available Project Funding (July 1, 2015)	\$	1,105,543
Requested Budget FY 2016	\$	5,000,000



Green roof at Ducketts Lane ES.

Project Details

The roof system is the largest single area of the building that must endure the most severe weather conditions. The roof protects the structural integrity of the building as well as equipment. Because of building age and environmental conditions, scheduled roof replacements must be completed to protect the investment that has been made in many facilities.

Reroofing for various schools including design and construction of repairs to existing roofs, old roof removal, new flashing and drains, and installation of new roofing structure and material.

The following schools are included in the FY 2016 Capital Budget:

Wilde Lake HS
Centennial HS
Harpers Choice MS



Playground Equipment

Project 0990

Various locations



The Safety and Risk Management Office oversees the Playground Equipment Project, managing safety requirements and a long term replacement plan for all HCPSS playgrounds. Actual costs incurred in the Playground Equipment Project over the past five years is below.

Playgrounds Actual Expenses	
Fiscal Year	Actual Expense
FY 2010	\$ 48,579
FY 2011	\$ -
FY 2012	\$ 398,430
FY 2013	\$ 240,677
FY 2014	\$ 8,506

Project Purpose

The Playground Equipment project will replace aging playgrounds at a variety of Howard County Public School System schools. This fund maintains a cycle of playground replacement. While playgrounds seem to be a standard installment at any elementary school, playgrounds can vary widely in design and are not specifically required by state or local codes or policies. Recess and unstructured play is a standard of Policy 9090 - Health and Wellness. Research supports a link between learning and unstructured play. Elementary school students are stimulated by interesting and engaging playground installations. The playground planning process considers the needs of a wide range of ages and skills to develop strength, social skills, coordination, balance and motor planning.

FY 2016 Request Analysis

Project Funding (July 1, 2001 - June 30, 2015)	\$	2,380,000
Project Cost-to-Date (through June 30, 2014)		(1,733,100)
FY 2015 Projected Costs		(512,173)
Available Project Funding (July 1, 2015)	\$	134,727
Requested Budget FY 2016	\$	300,000

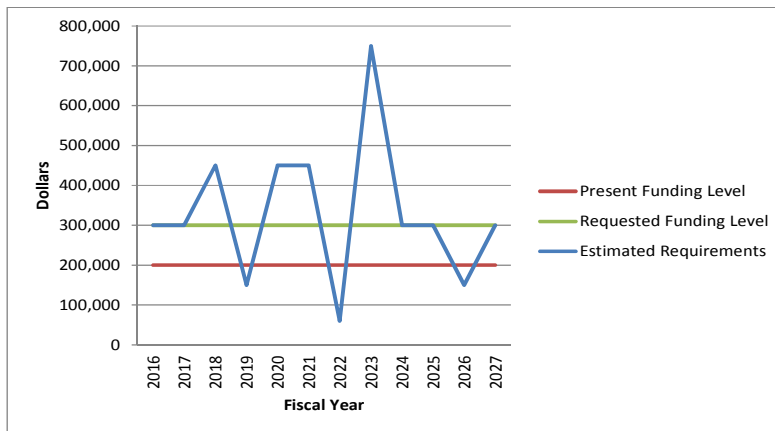


Project Details

Playground replacement is planned every 15 years. In the interim, they are maintained and repaired using operating funds. This schedule delivers new designs and safety improvements on a reasonable period without requiring a much larger share of the capital budget. The \$300,000 request is adequate for the short term. In future years, more than two playground replacements are needed in one year. The long term plan could be adjusted to smooth out the number of replacements per year by advancing or delaying some projects. Decisions about installing specific equipment are school based and require individual contracts. Better pricing may be possible through package bidding. Playground equipment at newly built schools is included in the funding request for the individual capital improvement project.



Projected Playground Replacement Costs per Fiscal Year



The chart above shows the estimated funding requirements based upon the long term plan listed to the right. Advancing or delaying some projects may help to smooth the funding profile but the graph shows that present funding levels will not be sufficient with future requirements. Risk management and purchasing staff are exploring different bidding methods with standard design options which may save on design costs.

Long Term Plan	
Playground Site	Fiscal Year
Hollifield Station ES	FY 2016
Manor Woods ES	FY 2016
Bryant Woods ES	FY 2017
Guilford ES	FY 2017
Clarksville ES	FY 2018
Triadelphia Ridge ES	FY 2018
Worthington ES	FY 2018
Bellows Spring ES	FY 2019
Gorman Crossing ES	FY 2020
Rockburn ES	FY 2020
Thunder Hill ES	FY 2020
Lisbon ES	FY 2021
Centennial Lane ES	FY 2021
St Johns Lane ES	FY 2021
West Friendship ES	FY 2022
Atholton ES	FY 2022
Dayton Oaks ES	FY 2022
Cedar Lane	FY 2022
Fulton ES	FY 2023
Phelps Luck ES	FY 2023
Bollman Bridge ES	FY 2023
Bushy Park ES	FY 2023
Cradlerock ES	FY 2023
Veterans ES	FY 2024
Ilchester ES	FY 2024
Waterloo ES	FY 2025
Clemens Crossing ES	FY 2025
Northfield ES	FY 2026
Ducketts Lane ES	FY 2027
Stevens Forest ES	FY 2027

Relocatable Classrooms

Project 0993



The School Planning Office evaluates relocatable classroom needs annually in a report to the Board of Education. After a decision is made, the Construction Department oversees the placing and connecting of all HCPSS relocatables. Actual costs incurred in the Relocatable Classrooms Project over the past five years is below.

Relocatable Classrooms Actual Expenses	
Fiscal Year	Actual Expense
FY 2010	\$ 975,223
FY 2011	\$ 842,225
FY 2012	\$ 2,152,087
FY 2013	\$ 1,620,398
FY 2014	\$ 1,117,572

Project Purpose

The Relocatable Classrooms project will provide funds for the relocation of existing portable classrooms or purchase of new portable classrooms to be placed at schools in need of additional capacity. Relocation includes moving the structures as well as the installation of support services that make the portable structures functional classrooms. Additional classroom spaces are needed to help relieve overcapacity schools until such time as permanent classroom spaces are available.

FY 2016 Request Analysis

Project Funding (July 1, 2003 - June 30, 2015)	\$	16,210,000
Project Cost-to-Date (through June 30, 2014)		(14,470,671)
FY 2015 Projected Costs		(1,738,550)
Available Project Funding (July 1, 2015)	\$	779
Requested Budget FY 2016	\$	1,500,000



Project Details

It should be noted that in some cases modular units are integrated into a building's core facility. These units are in use at St. John's Lane, and Waverly Elementary Schools, as well as Clarksville Middle School. These units are included in building capacity because they are considered permanent additions. In recent renovations, for example Bollman Bridge ES, they have been replaced. Similar plans are underway at Deep Run Elementary and Patuxent Valley Middle Schools. The school system conducts annual reviews of the physical condition and usage of all relocatable/modular units. When units are inspected, the cost of repairs is weighed against the option of retiring the units. Cycling out, and even reducing the inventory, can create operating economies. However, any dramatic reduction of inventory would require a commiserate investment in brick and mortar construction.

In September 2014, there will be 234 relocatable/modular classrooms in use (four are used for administrative purposes at the Central Office, all others are at school sites). The school system will continue to conduct an annual review of all relocatables which will include condition and usage. The potential to either remove relocatables out-of-service, transport them to other locations where needed, or place them in excess to dispose of in an appropriate manner will be decided upon annually.

This work will be completed in the Summer of 2015.



Site Acquisition and Construction Reserve

Project 0995



Construction of Ducketts Lane ES.

The School Construction Department oversees the Site Acquisition and Construction Reserve Project. Actual costs incurred in the Site Acquisition and Construction Reserve Project over the past five years is below.

Site Acquisition/Construction Reserve Actual Expenses	
Fiscal Year	Actual Expense
FY 2010	\$ 16,115
FY 2011	\$ 51,795
FY 2012	\$ 4,126,230
FY 2013	\$ 526,091
FY 2014	\$ 4,258,073

Project Purpose

The Site Acquisition and Construction Reserve project is needed as a contingency reserve providing funds for use on an as-needed basis. Site funds are needed for future enrollment growth. This account is a contingency fund for site acquisition and school construction at various school sites. Recent emergent maintenance requirements have strained the school system's existing construction contingency accounts and additional funding is required to ensure that urgently needed repairs can be completed without delay.

FY 2016 Request Analysis

Project Funding (July 1, 2003 - June 30, 2015)	\$ 20,836,000
Project Cost-to-Date (through June 30, 2014)	(17,936,610)
FY 2015 Projected Costs	(100,000)
Available Project Funding (July 1, 2015)	\$ 2,799,390
Requested Budget FY 2016	\$ 2,000,000



Excavators staged for a construction project.

Project Details

This fund is for site acquisition. The selection and acquisition of appropriate school sites is integral to the development of a capital program. Each proposed school site is carefully evaluated prior to acquisition according to Board-approved selection criteria identified in Policy 6000 - Site Selection and Acquisition.

Delays in acquisition of suitable school sites may affect the timing of construction of needed schools. This can result in extended periods of overcrowding situations. In an effort to reduce such delays, the HCPSS continues to maintain a "land bank" that will be called upon to pursue the purchase of potential sites or portions of land to augment sites.

Larger sites identified in the subdivision review process may be reserved to be budgeted as line items in future capital budgets. The state of Maryland regulates but does not pay the costs for site acquisitions; therefore, funds for the purchase of school sites are provided locally by the Howard County Government.

This fund also serves as a construction reserve. Capital planning has been fairly accurate and overruns have been minimal so the actual use of the majority of this fund has been to acquire land. In the past, initial preplanning expenses have been charged to this account, but the FY 2016 budget introduces preplanning as a separate project request.



Loader Excavator operating at a construction site.

Technology

Equipment Replacement

Project 1021



Teachers utilize technology in media centers to facilitate instruction.

The Technology Operations Office oversees the Technology Project. A staff of 20 provides maintenance and support for over 4,700 teacher laptops and 781 school computer labs totaling over 21,200 computers and approximately 830 printers, copiers and multifunction devices throughout the system.

Technology Actual Expenses	
Fiscal Year	Actual Expense
FY 2011	\$ 8,027,642
FY 2012	\$ 5,335,262
FY 2013	\$ 5,714,919
FY 2014	\$ 3,606,457

Actual costs incurred in the Technology project over the past four years is above.

Project Purpose

The Technology project funds are required for continuous improvements and upgrades to the HCPSS network infrastructure and computer systems to ensure that instruction and business technology needs are met in a standard and equitable manner. Technology refresh programs, known as "Replacement Plans", have been established to ensure that all HCPSS students and school-based staff are equipped with the appropriate computing and network resources. The Replacement Plans are designed to ensure that these essential resources are kept at a standard for instruction and business operations.

FY 2016 Request Analysis

Project Funding (July 1, 2010 - June 30, 2015)	\$ 29,486,000
Project Cost-to-Date (through June 30, 2014)	(22,684,280)
FY 2015 Projected Costs	(6,714,650)
Available Project Funding (July 1, 2015)	\$ 87,069
Requested Budget FY 2016	\$ 7,500,000



Media Centers in each school provide students with access to computers.

Project Details

This project provides funding for technology equipment replacement. Computers for teachers and schools has historically been the most significant use of this funding.

In FY 2016 this project will fund the Replacement Plan 1.5 which is the initiative to provide computing devices to all teachers in support of instructional and administrative tasks. In addition, all high schools will receive new general purpose and media center computers to support student needs.

This initiative is in support of Goals 1, 2, 3 and 4 of Vision 2018 by providing new technologies for the aforementioned areas.



Teacher laptops allow staff to collaborate more effectively.

Replace all Computers Purchased in 2011 under RP1.5 with Like Model Computers						
Type	Position	Office/Curriculum Program	# labs	Description	Number	Total Cost
ES	Teachers	n/a	n/a	Apple MacBook Pro laptop	2,347	\$ 2,909,845
MS	Teachers	n/a	n/a	Apple MacBook Pro laptop	1,051	1,308,495
HS	Teachers	n/a	n/a	Apple MacBook Pro laptop	1,378	1,715,610
HS	n/a	GPML= general purpose mobile lab	27	Apple MacBook Pro laptop	810	1,008,450
HS	n/a	GPFL = general purpose fixed lab	14	Dell Optiplex3020 desktop	405	282,285
HS	n/a	Media Center	14	Dell Optiplex3020 desktop	395	275,315
			55		6,386	\$ 7,500,000

In Fall 2015, the Technology Department plans to replace over 4,700 teacher laptops and 1,600 high school computers with updated computing devices. As part of this process, all devices will have the latest approved operating systems and software. Professional development will be provided to staff as needed.

School Parking Lot Expansions

Project 1012

Various locations



The School Construction Department oversees the School Parking Lot Expansions Project. Actual costs incurred in the School Parking Lot Expansions Project over the past five years is below.

Parking Lot Expansion Actual Expenses	
Fiscal Year	Actual Expense
FY2010	\$ 4,538
FY2011	\$ 28
FY2012	\$ 1,976,199
FY2013	\$ -
FY2014	\$ -

Project Purpose

Parking lot expansions are necessary due to the insufficient supply of spaces to meet existing needs. Funds are used for parking improvements on sites that are not slated for other construction projects. The project provides for the construction of additional parking spaces and modification of parking lots to improve traffic flow patterns at existing school sites.

Project Details

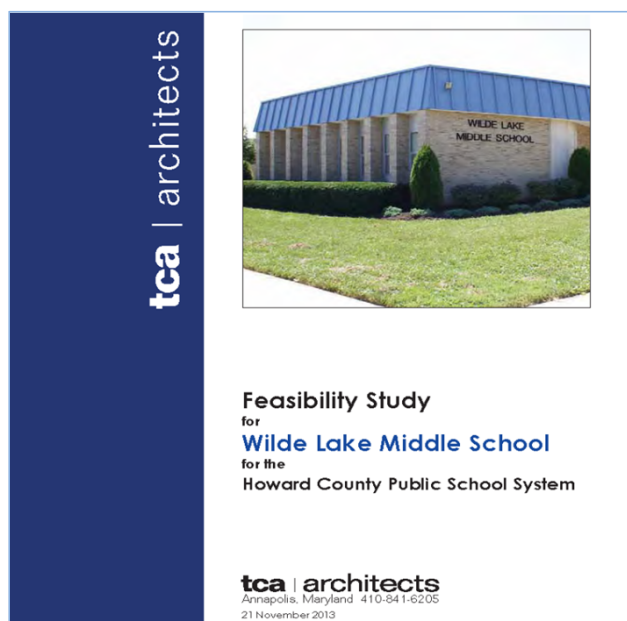
There are no parking lot projects scheduled for the 2014-2015 year. Future projects are to be determined as needed.



Planning and Design

Project 1038

Various locations



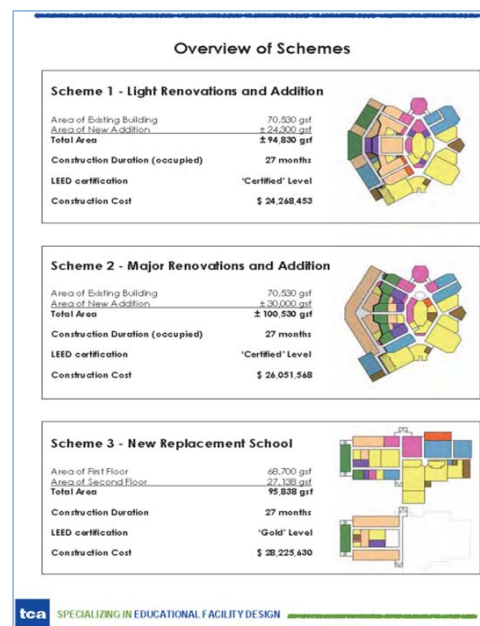
Project Purpose

The Planning and Design project has been established to provide funding for feasibility studies prior to the funding of individual projects. During the concept development stage, each project is summarized, supporting documentation is gathered, and necessary approvals are obtained before construction begins. A feasibility study provides the analysis to determine the scope and breadth of a project under consideration.

The value of these studies is having the flexibility to ask technical questions about projects before the formal design process. With these studies projects can be "right sized." The replacement of WLMS is a good example. The above feasibility study helped guide a decision to replace. Pricing for these studies is favorable because design consultants want to obtain the full design project.

Through a feasibility study the Board is able to examine the needs of an existing building as well as unexpected design circumstances. These studies ensure the selection of the most effective scope for each project. This process will reduce the costs associated with significant changes in scope which often occur in a compressed planning schedule. In the construction phase, the reduced number of change orders will lessen the impact on the construction schedule and decrease incremental costs.

The Office of School Construction oversees the planning and design for capital projects. Staff serve as the fiduciary agent for the administration of the Howard County Public School System/Board of education construction contracts. The Office recommends the selection of design consultants of capital projects to the Board of Education and supervises these consultants.



Proposed Feasibility Studies in FY 2016

Hammond High School Renovation
Ellicott Mills Middle School Addition
Dunloggin Middle School Renovation/Addition
Talbott Springs Elementary School Renovation
Patapsco Middle School Renovation

Barrier Free Projects

Project 0989



An accessibility ramp to access upper level play area at Bryant Woods ES.

The facilities Department oversees the Barrier Free Project. Actual costs incurred in the Barrier Free Project over the past five years is below.

Barrier Free Actual Expenses	
Fiscal Year	Actual Expense
FY 2010	\$ 199,951
FY 2011	\$ 189,386
FY 2012	\$ 74,420
FY 2013	\$ 77,734
FY 2014	\$ 119,445

Project Purpose

The Barrier Free Project will include installation of ramps; alteration of restrooms, fixtures and drinking fountains; and various modifications to make all remaining spaces (school buildings and school sites) accessible to the public, students, teachers, and staff. Federal, state, and local regulations require that school facilities be made accessible to the physically handicapped by removing barriers to access. Examples of projects include stadium bleacher ramps, play field access ramps, automatic door opening devices, and reconfiguration of bathroom fixtures and partitions to allow wheelchair access. Other school specific projects that remove barriers as described in justification.

FY 2016 Request Analysis

Project Funding (July 1, 1988 - June 30, 2015)	\$	5,228,000
Project Cost-to-Date (through June 30, 2014)		(4,743,827)
FY 2015 Projected Costs		(323,028)
Available Project Funding (July 1, 2015)	\$	161,145
Requested Budget FY 2016	\$	200,000



Lift room for access to stage.

Project Details

The Americans with Disabilities Act (ADA) of 1990 is a comprehensive civil rights law that makes it unlawful for public and private employers to discriminate against individuals with disabilities. This law as well as COMAR and best risk management practices require that HCPSS be ready to adjust our physical plant for access.

The barrier-free fund ensures our facilities provide full access to all students. When buildings are designed access issues are addressed in the schematic phase of a project. This practice generally produces buildings that are more accessible at the best cost.

With changing student enrollment, unique access issues may arise after the building is completed. This fund is used to make sensible, low cost adjustments to improve overall access. This project is ongoing.



Elevator for transportation to the second-story level.

Wilde Lake Middle School (Grades 6-8)

REPLACEMENT SCHOOL

Project: 1031

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ 5,358	\$ 18,234	\$ 12,895	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,487
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	1,500	-	-	-	-	-	-	-	-	-	-	1,500
Z Bonds	4,000	-	-	-	-	-	-	-	-	-	-	4,000
Total Funds	\$ 10,858	\$ 18,234	\$ 12,895	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,987

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ 2,658	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,658
Construction	8,200	18,234	10,695	-	-	-	-	-	-	-	-	37,129
Equip./Furnishings	-	-	2,200	-	-	-	-	-	-	-	-	2,200
Total Expenditures	\$ 10,858	\$ 18,234	\$ 12,895	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,987

Project Commencement FY 2014

Project: 1031

Patuxent Valley Middle School (Grades 6-8)

RENOVATION

Project: 1033

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ 5,360	\$ 10,300	\$ 10,085	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,745
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	2,785	-	-	-	-	-	-	-	-	-	-	2,785
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 8,145	\$ 10,300	\$ 10,085	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,530

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	8,145	10,300	9,835	-	-	-	-	-	-	-	-	28,280
Equip./Furnishings	-	-	250	-	-	-	-	-	-	-	-	250
Total Expenditures	\$ 8,145	\$ 10,300	\$ 10,085	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,530

FY 2016

Superintendent's Proposed Capital Budget

Swansfield Elementary School (Grades K-5)

RENOVATION / ADDITION

Project: 1034

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 1,898	\$12,361	\$10,832	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,091
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 1,898	\$12,361	\$10,832	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,091

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ 1,898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,898
Construction	-	12,361	10,757	-	-	-	-	-	-	-	-	23,118
Equip./Furnishings	-	-	75	-	-	-	-	-	-	-	-	75
Total Expenditures	\$ 1,898	\$12,361	\$10,832	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,091

Project Commencement FY 2015

Project: 1034

FY 2016

Superintendent's Proposed Capital Budget

Waverly Elementary School (Grades K-5)

RENOVATION / PHASE II ADDITION

Project: 0973

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$10,200	\$16,898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,098
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$10,200	\$16,898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,098

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	10,200	16,648	-	-	-	-	-	-	-	-	26,848
Equip./Furnishings	-	-	250	-	-	-	-	-	-	-	-	250
Total Expenditures	\$ -	\$10,200	\$16,898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,098

Project Commencement FY 2003

Project: 0973

FY 2016

Superintendent's Proposed Capital Budget

Oakland Mills Middle School (Grades 6-8)

LIMITED RENOVATION

Project: 1036

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ 4,000	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,000
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 4,000	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,000

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	4,000	5,000	4,750	-	-	-	-	-	-	-	13,750
Equip./Furnishings	-	-	-	250	-	-	-	-	-	-	-	250
Total Expenditures	\$ -	\$ 4,000	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,000

Project Commencement FY 2016

Project: 1036

New Elementary School #42 (Grades K-5)

NEW SCHOOL

Project: 1028

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ 2,807	\$ 11,640	\$ 23,633	\$ 2,460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,540
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 2,807	\$ 11,640	\$ 23,633	\$ 2,460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,540

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ 2,807	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,807
Construction	-	-	11,640	22,133	1,460	-	-	-	-	-	-	35,233
Equip./Furnishings	-	-	-	1,500	1,000	-	-	-	-	-	-	2,500
Total Expenditures	\$ -	\$ 2,807	\$ 11,640	\$ 23,633	\$ 2,460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,540

FY 2016

Superintendent's Proposed Capital Budget

Hammond High School (Grades 9-12)

RENOVATION

Project: 1024

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ 3,790	\$ 18,124	\$ 18,999	\$ 18,374	\$ 19,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,287
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 3,790	\$ 18,124	\$ 18,999	\$ 18,374	\$ 19,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,287

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ 3,790	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,790
Construction	-	-	18,124	18,999	18,374	17,969	-	-	-	-	-	73,466
Equip./Furnishings	-	-	-	-	-	1,031	-	-	-	-	-	1,031
Total Expenditures	\$ -	\$ 3,790	\$ 18,124	\$ 18,999	\$ 18,374	\$ 19,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,287

Project Commencement FY 2016

Project: 1024

FY 2016

Superintendent's Proposed Capital Budget

Ellicott Mills Middle School (Grades 6-8)

ADDITION

Project: 1037

(In Thousands)

83

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ -	\$ 432	\$ 3,440	\$ 2,293	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,165
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ 432	\$ 3,440	\$ 2,293	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,165

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ 432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 432
Construction	-	-	-	3,440	1,793	-	-	-	-	-	-	5,233
Equip./Furnishings	-	-	-	-	500	-	-	-	-	-	-	500
Total Expenditures	\$ -	\$ -	\$ 432	\$ 3,440	\$ 2,293	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,165

Project Commencement FY 2017

Project: 1037

Oakland Mills High School (Grades 9-12)

RENOVATION

Project: 1029

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,167	\$ 38,685	\$ 25,790	\$ -	\$ -	\$ -	\$ 70,642
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,167	\$ 38,685	\$ 25,790	\$ -	\$ -	\$ -	\$ 70,642

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,167	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,167
Construction	-	-	-	-	-	-	38,685	25,290	-	-	-	63,975
Equip./Furnishings	-	-	-	-	-	-	-	500	-	-	-	500
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,167	\$ 38,685	\$ 25,790	\$ -	\$ -	\$ -	\$ 70,642

Project Commencement FY 2020

Project: 1029

FY 2016

Superintendent's Proposed Capital Budget

New Elementary School #43 (Grades K-5)

NEW SCHOOL

Project: 1039

(In Thousands)

85

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,180	\$ 14,300	\$ 14,300	\$ 11,518	\$ -	\$ -	\$ 44,298
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,180	\$ 14,300	\$ 14,300	\$ 11,518	\$ -	\$ -	\$ 44,298

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,180	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,180
Construction	-	-	-	-	-	-	14,300	14,300	9,018	-	-	37,618
Equip./Furnishings	-	-	-	-	-	-	-	-	2,500	-	-	2,500
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,180	\$ 14,300	\$ 14,300	\$ 11,518	\$ -	\$ -	\$ 44,298

Project Commencement FY 2020

Project: 1039

FY 2016

Superintendent's Proposed Capital Budget

Centennial High School (Grades 9-12)

RENOVATION

Project: 1025

(In Thousands)

88

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,151	\$ 38,592	\$ 25,728	\$ -	\$ 70,471
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,151	\$ 38,592	\$ 25,728	\$ -	\$ 70,471

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,151	\$ -	\$ -	\$ -	\$ 6,151
Construction	-	-	-	-	-	-	-	-	38,592	25,228	-	63,820
Equip./Furnishings	-	-	-	-	-	-	-	-	-	500	-	500
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,151	\$ 38,592	\$ 25,728	\$ -	\$ 70,471

Project Commencement FY 2022

Project: 1025

New Elementary School #44 (Grades K-5)

NEW SCHOOL

Project: 1040

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,320	\$ 15,670	\$ 15,670	\$ 11,334	\$ 46,994
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,320	\$ 15,670	\$ 15,670	\$ 11,334	\$ 46,994

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,320	\$ -	\$ -	\$ -	\$ 4,320
Construction	-	-	-	-	-	-	-	-	15,670	15,670	8,834	40,174
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	2,500	2,500
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,320	\$ 15,670	\$ 15,670	\$ 11,334	\$ 46,994

Project Commencement FY 2022

Project: 1040

FY 2016

Superintendent's Proposed Capital Budget

New Elementary School #45 (Grades K-5)

NEW SCHOOL

Project: 1041

(In Thousands)

88

Source of Funds		Five-Year Capital Program							Master Plan			Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,460	\$ 16,330	\$ 16,330	\$ 37,120
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,460	\$ 16,330	\$ 16,330	\$ 37,120

Use of Funds		Five-Year Capital Program							Master Plan			Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,460	\$ -	\$ -	\$ 4,460
Construction	-	-	-	-	-	-	-	-	-	16,330	16,330	32,660
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,460	\$ 16,330	\$ 16,330	\$ 37,120

Project Commencement FY 2023

Project: 1041

FY 2016

Superintendent's Proposed Capital Budget

New High School #13 (Grades 9-12)

NEW SCHOOL

Project: 1035

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$10,764	\$51,226	\$ 61,990
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$10,764	\$51,226	\$ 61,990

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$10,764	\$ -	\$ 10,764
Construction	-	-	-	-	-	-	-	-	-	-	51,226	51,226
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$10,764	\$51,226	\$ 61,990

Project Commencement FY 2024

Project: 1035

FY 2016

Superintendent's Proposed Capital Budget

New Middle School #21 (Grades K-5)

NEW SCHOOL

Project: 1042

(In Thousands)

06

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,880	\$ 4,880
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,880	\$ 4,880

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,880	\$ 4,880
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,880	\$ 4,880

Project Commencement FY 2025

Project: 1042

Systemic Renovations / Modernizations

Project: 0980

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 112,050	\$ 9,263	\$ 18,708	\$ 59,909	\$ 88,114	\$ 78,338	\$ 52,135	\$ 61,293	\$ 64,358	\$ 67,576	\$ 70,955	\$ 682,699
Paygo	4,555	-	-	-	-	-	-	-	-	-	-	4,555
State Aid	69,859	-	-	-	-	-	-	-	-	-	-	69,859
Transfer Tax	6,100	-	-	-	-	-	-	-	-	-	-	6,100
Z Bonds	26,323	-	-	-	-	-	-	-	-	-	-	26,323
Total Funds	\$ 218,887	\$ 9,263	\$ 18,708	\$ 59,909	\$ 88,114	\$ 78,338	\$ 52,135	\$ 61,293	\$ 64,358	\$ 67,576	\$ 70,955	\$ 789,536

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	218,887	9,263	18,708	59,909	88,114	78,338	52,135	61,293	64,358	67,576	70,955	789,536
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 218,887	\$ 9,263	\$ 18,708	\$ 59,909	\$ 88,114	\$ 78,338	\$ 52,135	\$ 61,293	\$ 64,358	\$ 67,576	\$ 70,955	\$ 789,536

Project Commencement FY 2004

Project: 0980

Roofing Projects

Project: 0994

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 23,204	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 73,204
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	9,582	-	-	-	-	-	-	-	-	-	-	9,582
Transfer Tax	3,251	-	-	-	-	-	-	-	-	-	-	3,251
Z Bonds	4,500	-	-	-	-	-	-	-	-	-	-	4,500
Total Funds	\$ 40,537	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 90,537

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	40,537	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	90,537
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 40,537	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 90,537

Project Commencement FY 2004

Project: 0994

Playground Equipment

Project: 0990

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 1,800	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 4,800
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	580	-	-	-	-	-	-	-	-	-	-	580
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 2,380	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 5,380

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	2,380	300	300	300	300	300	300	300	300	300	300	5,380
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 2,380	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 5,380

Project Commencement FY 2002

Project: 0990

Relocatable Classrooms

Project: 0993

(In Thousands)

94

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 13,210	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 28,210
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	1,600	-	-	-	-	-	-	-	-	-	-	1,600
Z Bonds	1,400	-	-	-	-	-	-	-	-	-	-	1,400
Total Funds	\$ 16,210	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 31,210

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	16,210	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	31,210
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 16,210	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 31,210

Project Commencement FY 2004

Project: 0993

FY 2016

Superintendent's Proposed Capital Budget

Site Acquisition and Construction Reserve

Project: 0995

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 9,425	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 29,425
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	2,594	-	-	-	-	-	-	-	-	-	-	2,594
Transfer Tax	8,817	-	-	-	-	-	-	-	-	-	-	8,817
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 20,836	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 40,836

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	20,836	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	40,836
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 20,836	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 40,836

Project Commencement FY 2004

Project: 0995

Technology

Project: 1021

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 9,986	\$ 7,500	\$ 10,000	\$ 6,000	\$ 5,000	\$ 7,500	\$ 10,000	\$ 5,000	\$ 7,500	\$ 10,000	\$ 6,000	\$ 84,486
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	19,500	-	-	-	-	-	-	-	-	-	-	19,500
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 29,486	\$ 7,500	\$ 10,000	\$ 6,000	\$ 5,000	\$ 7,500	\$ 10,000	\$ 5,000	\$ 7,500	\$ 10,000	\$ 6,000	\$ 103,986

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings	29,486	7,500	10,000	6,000	5,000	7,500	10,000	5,000	7,500	10,000	6,000	103,986
Total Expenditures	\$ 29,486	\$ 7,500	\$ 10,000	\$ 6,000	\$ 5,000	\$ 7,500	\$ 10,000	\$ 5,000	\$ 7,500	\$ 10,000	\$ 6,000	\$ 103,986

Project Commencement FY 2011

Project: 1021

School Parking Lot Expansions

Project: 1012

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ 2,800	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 8,200
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	1,400	-	-	-	-	-	-	-	-	-	-	1,400
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 4,200	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 9,600

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ 220	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 760
Construction	3,980	-	540	540	540	540	540	540	540	540	540	8,840
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 4,200	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 9,600

Project Commencement FY 2008

Project: 1012

Planning and Design

Project: 1038

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				Total
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Bonds	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,000
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,000

Use of Funds		Five-Year Capital Program						Master Plan				Total
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	
Plans/Engineering	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,000
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,000

Barrier Free

Project: 0989

(In Thousands)

66

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Bonds	\$ 3,675	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 5,675
Paygo	303	-	-	-	-	-	-	-	-	-	-	303
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	1,250	-	-	-	-	-	-	-	-	-	-	1,250
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 5,228	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 7,228

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	5,228	200	200	200	200	200	200	200	200	200	200	7,228
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 5,228	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 7,228

Project Commencement FY 1989

Project: 0989



Superintendent's Proposed
FY 2016 Capital Budget

Capital Improvement Program FY 2017–2021

Long-Range Master Plan FY 2016–2025

Supporting Data

September 2014



ELEMENTARY SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Board of Education's Approved FY 2015 Capital Budget Projects - Not Test for APFO

Chart reflects May 2014 Projections, Board of Education's FY 2015 approved capacities, and no redistricting.

	Capacity				2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		
	2015	2016	2017	2018	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	
Columbia - East	2015	2016	2017	2018	465	95.5	460	94.5	455	93.4	463	95.1	450	92.4	446	91.6	446	91.6	443	91.0	462	94.9	479	98.4	497	102.1	
Cradlerock ES	487	487	487	487	421	100.7	417	99.0	393	93.3	384	91.2	387	91.9	392	93.1	396	94.1	396	94.1	402	95.5	405	96.2	410	97.4	
Jeffers Hill ES	421	421	421	421	640	89.2	574	89.7	559	87.3	544	85.0	546	85.3	549	85.8	557	87.0	561	87.7	558	87.2	564	88.1	567	88.6	
Phelps Luck ES	640	640	640	640	433	99.3	439	101.4	452	104.4	455	105.1	454	104.8	460	106.2	463	106.9	469	108.3	467	107.9	470	108.5	474	109.5	
Stevens Forest ES	433	433	433	433	443	91.4	395	89.2	384	86.7	381	86.0	386	87.1	382	86.2	381	86.0	384	86.7	391	88.3	395	89.2	399	90.1	
Talbott Springs ES	443	443	443	443	468	113.2	529	113.0	525	112.2	523	111.8	518	110.7	522	111.5	520	111.1	527	112.6	536	114.5	542	115.8	C	545	116.5
Thunder Hill ES	468	468	468	468	2892	97.7	2814	97.3	2768	95.7	2750	95.1	2741	94.8	2751	95.1	2763	95.5	2780	96.1	2816	97.4	2855	98.7	2892	100.0	
Region Totals	2892	2892	2892	2892	2825	97.7	2814	97.3	2768	95.7	2750	95.1	2741	94.8	2751	95.1	2763	95.5	2780	96.1	2816	97.4	2855	98.7	2892	100.0	

Columbia - West	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016
Bryant Woods ES	355	355	355	355	343	96.6	351	98.9	358	100.8	371	104.5	379	106.8	381	107.3	384	108.2	389	109.6	390	109.9	392	110.4	397	111.8
Clemens Crossing ES	522	522	522	522	518	99.2	525	100.6	524	100.4	524	100.4	520	99.6	530	101.5	524	100.4	521	99.8	505	96.7	497	95.2	493	94.4
Longfellow ES	418	418	418	418	437	104.5	438	104.8	426	101.9	442	105.7	435	104.1	432	103.3	432	103.3	429	102.6	434	103.8	439	105.0	444	106.2
Running Brook ES	505	505	505	505	551	109.1	609	120.6	C	664	131.5	C	727	144.0	C	793	155.3	C	847	167.7	C	905	179.0	C	1023	202.6
Swansfield ES	A	528	528	528	576	109.1	573	108.5	564	106.8	566	107.1	557	106.7	557	106.7	554	106.2	562	107.5	565	108.0	571	109.0	576	110.7
Region Totals	2328	2328	2328	2328	2425	104.2	2496	107.2	2536	108.9	2630	108.3	2670	110.0	2737	112.7	2788	114.8	2851	117.4	2889	119.0	2922	120.3	2957	121.8

Northeastern																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</
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Northern																																					
Centennial Lane ES	628	628	628	628	693	110.4	720	114.6	736	117.2	C	756	120.4	C	790	125.8	C	810	129.0	C	814	129.6	C	818	130.3	C	822	130.9	C	826	131.5	C	831	132.3	C		
Hollifield Station ES	688	688	688	688	685	99.6	693	100.7	710	103.2		730	106.1		748	108.7		792	115.1		823	119.6		845	122.8		851	123.7		860	125.0		852	123.8			
Manor Woods ES	647	647	647	647	738	114.1	811	125.3	C	914	141.3	C	1025	158.4	C	1126	174.0	C	1230	190.1	C	1307	202.0	C	1356	209.6	C	1367	211.3	C	1354	209.3	C	1313	202.9	C	
Northfield ES	672	672	672	672	706	105.1	703	104.6		709	105.5		714	106.3		721	107.3		727	108.2		738	109.8		742	110.4		764	113.7		783	116.5		828	123.2	C	
St Johns Lane ES	597	597	597	597	731	122.4	C	726	121.6	C	750	125.6	C	762	127.6	C	751	125.8	C	773	129.5	C	774	129.6	C	784	131.3	C	780	130.7		787	131.8		809	135.5	C
Waverly ES	A	675	675	675	724	107.3	714	105.8		673	86.8		645	83.2		635	81.9		614	79.2		609	78.6		613	79.1		621	80.1		634	81.8		661	85.3		
Region Totals	3907	3907	4007	4007	4277	109.5	4367	111.8	4492	112.1	4632	115.6	C	4771	119.1	C	4946	123.4	C	5065	126.4	C	5158	128.7	C	5205	129.9	C	5244	130.9	C	5294	132.1	C			

Southeastern																																
Atholton ES	387	387	387	387	392	101.3	403	104.1	412	106.5	403	104.1	416	107.5	416	107.5	419	108.3	422	109.0	425	109.8	428	110.6	434	112.1						
Bollman Bridge ES	663	663	663	663	710	107.1	722	108.9	763	115.1	C	794	119.8	C	841	126.8	C	870	131.2	C	893	134.7	C	903	136.2	C	919	138.6				
Forest Ridge ES	626	626	626	626	815	130.2	C	850	135.8	C	901	143.9	C	935	149.4	C	979	156.4	C	1017	162.5	C	1024	163.6	C	1048	167.4					
Gorman Crossing ES	713	713	713	713	690	96.8	725	101.7	726	101.8	739	103.6	736	103.2	745	104.5	744	104.3	751	105.3	741	103.9	731	102.5	724	101.5						
Guilford ES	462	462	462	462	494	106.9	512	110.8	503	108.9	498	107.8	507	109.7	514	111.3	505	109.3	511	110.6	511	110.6	518	112.1	530	114.7						
Hammond ES	597	597	597	597	612	102.5	612	102.5	614	102.8	622	104.2	645	108.0	689	115.4	C	705	118.1	C	713	119.4	C	732	122.6	C	755	126.5				
Laurel Woods ES	A	640	640	640	544	85.0	541	84.5	558	87.2	573	89.5	559	87.3	547	85.5	558	87.2	552	86.3	554	86.6	555	86.7	558	87.2						
Region Totals	4088	4088	4088	4088	4257	104.1	4365	106.8	4477	109.5	4564	111.6	4683	114.6	4798	117.4	C	4848	118.6	C	4900	119.9	C	4960	121.3	C	5006	122.5	C	5039	123.3	C

MIDDLE SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Board of Education's Approved FY 2015 Capital Budget Projects - Not Test for APFO

Chart reflects May 2014 Projections, Board of Education's FY 2015 approved capacities, and no redistricting.

	Capacity				2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26	
	2015	2016	2017	2018	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East	643	643	643	643	554	86.2	563	87.6	604	93.9	622	96.7	626	97.4	620	96.4	625	97.2	624	97.0	611	95.0	611	95.0	610	94.9
Lake Elkhorn MS	643	643	643	643	554	86.2	563	87.6	604	93.9	622	96.7	626	97.4	620	96.4	625	97.2	624	97.0	611	95.0	611	95.0	610	94.9
Oakland Mills MS	506	506	506	506	486	96.0	484	95.7	486	96.0	512	101.2	518	102.4	519	102.6	516	102.0	513	101.4	520	102.8	521	103.0	528	104.3
Region MS Totals	1149	1149	1149	1149	1040	90.5	1047	91.1	1090	94.9	1134	98.7	1144	99.6	1139	99.1	1141	99.3	1137	99.0	1131	98.4	1132	98.5	1138	99.0
Columbia - West	506	506	506	506	559	110.5	574	113.4	598	118.2	592	117.0	612	120.9	591	116.8	616	121.7	596	117.8	590	116.6	584	115.4	587	116.0
Harpers Choice MS	506	506	506	506	559	110.5	574	113.4	598	118.2	592	117.0	612	120.9	591	116.8	616	121.7	596	117.8	590	116.6	584	115.4	587	116.0
Wilde Lake MS	R 467	467	701	701	573	122.7	C 599	128.3	C 670	95.6	693	98.9	741	105.7	740	105.6	768	109.6	787	112.3	834	119.0	C 875	124.8	C 922	131.5
Region MS Totals	973	973	1207	1207	1132	116.3	C 1173	120.6	C 1268	105.1	1285	106.5	1353	112.1	1331	110.3	1384	114.7	1383	114.6	1424	118.0	C 1459	120.9	C 1509	125.0
Northeastern	662	662	662	662	641	96.8	655	98.9	693	104.7	735	111.0	749	113.1	699	105.6	667	100.8	649	98.0	657	99.2	650	98.2	657	99.2
Bonnie Branch MS	662	662	662	662	641	96.8	655	98.9	693	104.7	735	111.0	749	113.1	699	105.6	667	100.8	649	98.0	657	99.2	650	98.2	657	99.2
Elkridge Landing MS	779	779	779	779	752	96.5	741	95.1	763	97.9	734	94.2	742	95.3	747	95.9	782	100.4	798	102.4	816	104.7	838	107.6	845	108.5
Ellicott Mills MS	662	662	662	662	791	119.5	C 802	121.1	C 840	126.9	C 852	128.7	C 883	133.4	C 909	137.3	C 937	141.5	C 929	140.3	C 931	140.6	C 917	138.5	C 926	139.9
Mayfield Woods MS	798	798	798	798	666	83.5	698	87.5	757	94.9	780	97.7	851	106.6	863	108.1	901	112.9	916	114.8	964	120.8	C 1007	126.2	C 1021	127.9
Thomas Viaduct MS	NS 662	662	662	662	574	86.7	629	95.0	700	105.7	733	110.7	803	121.3	C 833	125.8	C 891	134.6	C 899	135.8	C 966	145.9	C 1026	155.0	C 1093	165.1
Region MS Totals	3563	3563	3563	3563	3424	96.1	3525	98.9	3753	105.3	3834	107.6	4028	113.1	4051	113.7	4178	117.3	4191	117.6	C 4334	121.6	C 4438	124.6	C 4542	127.5
Northern	779	779	779	779	774	99.4	784	100.6	769	98.7	767	98.5	782	100.4	808	103.7	839	107.7	892	114.5	938	120.4	C 976	125.3	C 999	128.2
Burleigh Manor MS	779	779	779	779	774	99.4	784	100.6	769	98.7	767	98.5	782	100.4	808	103.7	839	107.7	892	114.5	938	120.4	C 976	125.3	C 999	128.2
Dunloggin MS	A 565	565	565	565	628	111.2	668	118.2	C 674	119.3	C 674	119.3	C 678	120.0	C 689	121.9	C 712	126.0	C 716	126.7	C 722	127.8	C 720	127.4	C 721	127.6
Patapsco MS	643	643	643	643	697	108.4	703	109.3	731	113.7	752	117.0	C 768	119.4	C 762	118.5	C 773	120.2	C 753	117.1	C 786	122.2	C 789	122.7	C 812	126.3
Region MS Totals	1987	1987	1987	1987	2099	105.6	2155	108.5	2174	109.4	2193	110.4	2228	112.1	2259	113.7	2324	117.0	C 2361	118.8	C 2446	123.1	C 2485	125.1	C 2532	127.4
Southeastern	604	604	604	604	560	92.7	596	98.7	602	99.7	629	104.1	654	108.3	682	112.9	685	113.4	709	117.4	C 738	122.2	C 758	125.5	C 771	127.6
Hammond MS	604	604	604	604	560	92.7	596	98.7	602	99.7	629	104.1	654	108.3	682	112.9	685	113.4	709	117.4	C 738	122.2	C 758	125.5	C 771	127.6
Murray Hill MS	662	662	662	662	644	97.3	689	104.1	727	109.8	746	112.7	810	122.4	C 843	127.3	C 839	126.7	C 800	120.8	C 792	119.6	C 804	121.5	C 804	121.5
Patuxent Valley MS	760	760	760	760	685	90.1	766	100.8	758	99.7	844	111.1	838	110.3	873	114.9	878	115.5	C 911	119.9	C 948	124.7	C 976	128.4	C 1018	133.9
Region MS Totals	2026	2026	2026	2026	1889	93.2	2051	101.2	2087	103.0	2219	109.5	2302	113.6	2398	118.4	C 2402	118.6	C 2420	119.4	C 2478	122.3	C 2538	125.3	C 2593	128.0
Western	643	643	643	643	602	93.6	579	90.0	543	84.4	521	81.0	537	83.5	514	79.9	490	76.2	470	73.1	476	74.0	482	75.0	479	74.5
Clarksville MS	643	643	643	643	602	93.6	579	90.0	543	84.4	521	81.0	537	83.5	514	79.9	490	76.2	470	73.1	476	74.0	482	75.0	479	74.5
Folly Quarter MS	662	662	662	662	606	91.5	610	92.1	632	95.5	649	98.0	706	106.6	710	107.3	704	106.3	700	105.7	723	109.2	732	110.6	719	108.6
Glenwood MS	545	545	545	545	565	103.7	544	99.8	533	97.8	497	91.2	521	95.6	515	94.5	523	96.0	485	89.0	493	90.5	487	89.4	512	93.9
Lime Kiln MS	701	701	701	701	720	102.7	728	103.9	722	103.0	724	103.3	774	110.4	779	111.1	786	112.1	788	112.4	804	114.7	811	115.7	C 797	113.7
Mount View MS	798	798	798	798	762	95.5	779	97.6	796	99.7	832	104.3	848	106.3	867	108.6	855	107.1	875	109.6	882	110.5	922	115.5	C 938	117.5
Region MS Totals	3349	3349	3349	3349	3255	97.2	3240	96.7	3226	96.3	3223	96.2	3386	101.1	3385	101.1	3358	100.3	3318	99.1	3378	100.9	3434	102.5	3445	102.9
Countywide Totals	13047	13047	13281	13281	12839	98.4	13191	101.1	13598	102.4	13888	104.6	14441	108.7	14563	109.7	14787	111.3	14810	111.5	15191	114.4	15486	116.6	15759	118.7

A' includes additions as reflected in FY 2015 CIP for grades 6-8

HIGH SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Board of Education's Approved FY 2015 Capital Budget Projects - Not Test for APFO

Chart reflects May 2014 Projections, Board of Education's FY 2015 approved capacities, and no redistricting.

Capacity					2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26	
	2015	2016	2017	2018	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East	1400	1400	1400	1400	1161	82.9	1240	88.6	1279	91.4	1280	91.4	1355	96.8	1369	97.8	1400	100.0	1449	103.5	1451	103.6	1455	103.9	1461	104.4
Oakland Mills HS																										
Columbia - West	1424	1424	1424	1424	1335	93.8	1369	96.1	1439	101.1	1483	104.1	1531	107.5	1618	113.6	1629	114.4	1680	118.0	1711	120.2	1709	120.0	1748	122.8
Wilde Lake HS																										
Northeastern	1420	1420	1420	1420	1867	131.5	1997	140.6	2138	150.6	2270	159.9	2341	164.9	2415	170.1	2465	173.6	2536	178.6	2579	181.6	2569	180.9	2611	183.9
Howard HS	1488	1488	1488	1488	1494	100.4	1582	106.3	1678	112.8	1762	118.4	1868	125.5	1986	133.5	2026	136.2	2166	145.6	2233	150.1	2261	151.9	2389	160.6
Long Reach HS																										
Region HS Totals	2908	2908	2908	2908	3361	115.6	3579	123.1	3816	131.2	4032	138.7	4209	144.7	4401	151.3	4491	154.4	4702	161.7	4812	165.5	4830	166.1	5000	171.9
Northern	1360	1360	1360	1360	1447	106.4	1495	109.9	1588	116.8	1640	120.6	1651	121.4	1666	122.5	1680	123.5	1688	124.1	1728	127.1	1795	132.0	1846	135.7
Centennial HS	1615	1615	1615	1615	1258	77.9	1303	80.7	1374	85.1	1426	88.3	1428	88.4	1464	90.7	1497	92.7	1518	94.0	1545	95.7	1551	96.0	1563	96.8
Marriotts Ridge HS	1400	1400	1400	1400	1460	104.3	1542	110.1	1583	113.1	1639	117.1	1735	123.9	1755	125.4	1805	128.9	1860	132.9	1852	132.3	1888	134.9	1893	135.2
Mt Hebron HS																										
Region HS Totals	4375	4375	4375	4375	4165	95.2	4340	99.2	4545	103.9	4705	107.5	4814	110.0	4885	111.7	4982	113.9	5066	115.8	5125	117.1	5234	119.6	5302	121.2
Southeastern	1220	1220	1220	1220	1307	107.1	1338	109.7	1406	115.2	1480	121.3	1601	131.2	1693	138.8	1779	145.8	1878	153.9	1896	155.4	1969	161.4	2007	164.5
Hammond HS																										
Western	1360	1360	1360	1360	1467	107.9	1471	108.2	1550	114.0	1617	118.9	1628	119.7	1700	125.0	1734	127.5	1773	130.4	1824	134.1	1839	135.2	1868	137.4
Atholton HS	1420	1420	1420	1420	1275	89.8	1239	87.3	1227	86.4	1290	90.8	1278	90.0	1274	89.7	1290	90.8	1290	90.8	1302	91.7	1320	93.0	1309	92.2
Glenelg HS	1551	1551	1551	1551	1547	99.7	1575	101.5	1635	105.4	1761	113.5	1824	117.6	1882	121.3	1944	125.3	2019	130.2	2066	133.2	2113	136.2	2137	137.8
Reservoir HS	1488	1488	1488	1488	1286	86.4	1255	84.3	1281	86.1	1276	85.8	1250	84.0	1260	84.7	1249	83.9	1266	85.1	1285	86.4	1271	85.4	1272	85.5
River Hill HS																										
Region HS Totals	5819	5819	5819	5819	5575	95.8	5540	95.2	5693	97.8	5944	102.1	5980	102.8	6116	105.1	6217	106.8	6348	109.1	6477	111.3	6543	112.4	6586	113.2
Countywide Totals	17146	17146	17146	17146	16904	98.6	17406	101.5	18178	106.0	18924	110.4	19490	113.7	20082	117.1	20498	119.5	21123	123.2	21472	125.2	21740	126.8	22104	128.9

Post-Measures

Aggregate Plan

Chart reflects May 2014 Projections, Board of Education's FY 2016 Requested capacities and estimated redistricting.

ELEMENTARY SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Proposed FY 2016 Capital Budget Projects - Not Test for APFO

	Capacity				2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26	
	2015	2016	2017	2018	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East	2849	2849	2849	2849	2825	99.2	2814	98.8	2768	97.2	2750	96.5	2741	96.2	2751	96.6	2763	97.0	2780	97.6	2816	98.8	2855	100.2	2892	101.5
Cradlerock ES	398	398	398	398	465	116.8 C	460	115.6 C	455	114.3	463	116.3 C	450	113.1	446	112.1	446	112.1	443	111.3	462	116.1 C	479	120.4 C	497	124.9 C
Jeffers Hill ES	421	421	421	421	424	100.7	417	99.0	393	93.3	384	91.2	387	91.9	392	93.1	396	94.1	396	94.1	402	95.5	405	96.2	410	97.4
Phelps Luck ES	663	663	663	663	571	86.1	574	86.6	559	84.3	544	82.1	546	82.4	549	82.8	557	84.0	561	84.6	558	84.2	564	85.1	567	85.5
Stevens Forest ES	443	443	443	443	430	97.1	439	99.1	452	102.0	455	102.7	454	102.5	460	103.8	463	104.5	469	105.9	467	105.4	470	106.1	474	107.0
Talbot Springs ES	415	415	415	415	405	97.6	395	95.2	384	92.5	381	91.8	386	93.0	382	92.0	381	91.8	384	92.5	391	94.2	395	95.2	399	96.1
Thunder Hill ES	509	509	509	509	530	104.1	529	103.9	525	103.1	523	102.8	518	101.8	522	102.6	520	102.2	527	103.5	536	105.3	542	106.5	545	107.1

Columbia - West	2430	2430	2530	2530	2425	99.8	2496	102.7	2536	100.2	2630	104.0	2670	105.5	2737	108.2	2788	110.2	2851	112.7	2889	114.2	2922	115.5 C	2957	92.4
Bryant Woods ES	361	361	361	361	343	95.0	351	97.2	358	99.2	371	102.8	379	105.0	381	105.5	384	106.4	389	107.8	390	108.0	392	108.6	397	110.0
Clemens Crossing ES	521	521	521	521	518	99.4	525	100.8	524	100.6	524	100.6	520	99.8	530	101.7	524	100.6	521	100.0	505	96.9	497	95.4	493	94.6
Longfellow ES	512	512	512	512	437	85.4	438	85.5	426	83.2	442	86.3	435	85.0	432	84.4	432	84.4	429	83.8	434	84.8	439	85.7	444	86.7
New ES #44 NS	0	0	0	0																						
Running Brook ES	515	515	515	515	551	107.0	609	118.3 C	664	128.9 C	727	141.2 C	779	151.3 C	837	162.5 C	894	173.6 C	950	184.5 C	995	193.2 C	1023	198.6 C	1047	203.3 C
Swansfield ES	521	521	621	621	576	110.6	573	110.0	564	90.8	566	91.1	557	89.7	557	89.7	554	89.2	562	90.5	565	91.0	571	91.9	576	92.8

Northeastern	6168	6268	6268	6268	6280	101.8	6504	103.8	6724	107.3	6969	111.2	7192	103.7	7336	105.8	7452	107.4	7569	109.1	7629	110.0	7697	111.0	7775	112.1
Bellows Spring ES	751	751	751	751	683	90.9	734	97.7	788	104.9	841	112.0	886	118.0 C	917	122.1 C	936	124.6 C	938	124.9 C	923	122.9 C	927	123.4 C	922	122.8 C
Deep Run ES	647	747	747	747	688	106.3	736	98.5	769	102.9	817	109.4	818	109.5	845	113.1	867	116.1 C	867	116.1 C	870	116.5 C	868	116.2 C	862	115.4 C
Ducketts Lane ES	669	669	669	669	774	115.7 C	859	128.4 C	970	145.0 C	1091	163.1 C	698	104.3	776	116.0 C	828	123.8 C	856	128.0 C	834	124.7 C	802	119.9 C	771	115.2 C
Elkridge ES	760	760	760	760	826	108.7	851	112.0	862	113.4	886	116.6 C	894	117.6 C	896	117.9 C	898	118.2 C	909	119.6 C	924	121.6 C	946	124.5 C	969	127.5 C
Ilchester ES	653	653	653	653	694	106.3	671	102.8	640	98.0	601	92.0	579	88.7	584	89.4	601	92.0	639	97.9	671	102.8	691	105.8	726	111.2
New ES #42 NS	0	0	0	0																						
Rockburn ES	672	672	672	672	619	92.1	604	89.9	599	89.1	610	90.8	597	88.8	614	91.4	651	96.9	687	102.2	712	106.0	733	109.1	756	112.8
Veterans ES	788	788	788	788	858	108.9	885	112.3	913	115.9 C	926	117.5 C	923	117.1 C	911	115.6 C	882	111.9	870	110.4	880	111.7	884	112.2	894	113.5
Waterloo ES	663	663	663	663	587	88.5	622	93.8	643	97.0	670	101.1	674	101.7	685	103.3	700	105.6	701	105.7	703	106.0	712	107.4	721	108.7
Worthington ES	565	565	565	565	551	97.5	542	95.9	540	95.6	527	93.3	523	92.6	508	89.9	489	86.5	502	88.8	512	90.6	534	94.5	554	98.1

Northern	3972	3972	3972	4072	4277	107.7	4367	109.9	4392	110.6	4532	111.3	4671	114.7	4846	119.0 C	4965	121.9 C	5058	124.2 C	5105	125.4 C	5144	126.3 C	5194	127.6 C
Centennial Lane ES	647	647	647	647	693	107.1	720	111.3	736	113.8	756	116.8 C	790	122.1 C	810	125.2 C	814	125.8 C	818	126.4 C	822	127.0 C	826	127.7 C	831	128.4 C
Hollifield Station ES	694	694	694	694	685	98.7	693	99.9	710	102.3	730	105.2	748	107.8	792	114.1	823	118.6 C	845	121.8 C	851	122.6 C	860	123.9 C	852	122.8 C
Manor Woods ES	681	681	681	681	738	108.4	811	119.1 C	689	101.2	800	117.5 C	901	132.3 C	1005	147.6 C	1082	158.9 C	1131	166.1 C	1142	167.7 C	1129	165.8 C	1088	158.8 C
New ES #45 NS	0	0	0	0																						
Northfield ES	700	700	700	700	706	100.9	703	100.4	709	101.3	714	102.0	721	103.0	727	103.9	738	105.4	742	106.0	764	109.1	783	111.9	828	118.3 C
St Johns Lane ES	612	612	612	612	731	119.4 C	726	118.6 C	750	122.5 C	762	124.5 C	751	122.7 C	773	126.3 C	774	126.5 C	784	128.1 C	780	127.5 C	787	128.6 C	809	132.2 C
Waverly ES	638	638	638	738	724	113.5	714	111.9	798	125.1 C	770	104.3	760	103.0	739	100.1	734	99.5	738	100.0	746	101.1	759	102.8	786	106.5

Southeastern	4217	4217	4217	4217	4257	100.9	4365	103.5	4477	106.2	4564	108.2	4563	108.2	4678	110.9	4728	112.1	4780	113.4	4840	99.1	4886	100.0	4919	100.7
Atholton ES	424	424	424	424	392	92.5	403	95.0	412	97.2	403	95.0	416	98.1	416	98.1	419	98.8	422	99.5	425	100.2	428	100.9	434	102.4
Bollman Bridge ES	666	666	666	666	710	106.6	722	108.4	763	114.6	794	119.2 C	781	117.3 C	810	121.6 C	833	125.1 C	843	126.6 C	859	129.0 C	874	131.2 C	878	131.8 C
Forest Ridge ES	669	669	669	669	815	121.8 C	850	127.1 C	901	134.7 C	935	139.8 C	919	137.4 C	957	143.0 C	964	144.1 C	988	147.7 C	1018	152.2 C	1025	153.2 C	1015	151.7 C
Gorman Crossing ES	700	700	700	700	690	98.6	725	103.6	726	103.7	739	105.6	736	105.1	745	106.4	744	106.3	751	107.3	741	105.9	731	104.4	724	103.4
Guilford ES	465	465	465	465	494	106.2	512	110.1	503	108.2	498	107.1	507	109.0	514	110.5	505	108.6	511	109.9	511	109.9	518	111.4	530	114.0
Hammond ES	653	653	653	653	612	93.7	612	93.7	614	94.0	622	95.3	645	98.8	689	105.5	705	108.0	713	109.2	732	112.1	755	115.6 C	780	119.4 C
Laurel Woods ES	640	640	640	640	544	85.0	541	84.5	558	87.2	573	89.5	559	87.3	547	85.5	558	87.2	552	86.3	554	86.6	555	86.7	558	87.2
New ES #43 NS	0	0	0	0																						

Western				572	72.6	561	71.2	637	80.8	644	81.7	640	81.2	650	82.5	648	82.2	658	83.5	648	82.2	656	83.2	675	85.7				
Bushy Park ES	788	788	788	788	459	75.0	442	72.2	417	68.1	394	64.4	382	62.4	378	61.8	377	61.6	384	62.7	384	62.7	387	63.2	391	63.9			
Clarksville ES	612	612	612	612	594	75.4	617	78.3	601	76.3	576	73.1	545	69.2	531	67.4	540	68.5	520	66.0	531	67.4	535	67.9	539	68.4			
Dayton Oaks ES	788	788	788	788	770	97.7	838	106.3	882	111.9	918	116.5	C	929	117.9	C	929	117.9	C	896	113.7	853	108.2	838	106.3	823	104.4		
Fulton ES	788	788	788	788	572	72.6	561	71.2	637	80.8	644	81.7	640	81.2	650	82.5	648	82.2	658	83.5	648	82.2	656	83.2	675	85.7			
Lisbon ES	527	527	527	527	368	69.8	357	67.7	362	68.7	357	67.7	346	65.7	344	65.3	344	65.3	355	67.4	363	68.9	369	70.0	371	70.4			
Pointers Run ES	744	744	744	744	701	94.8	723	97.2	735	98.8	737	100.7	729	98.0	734	98.7	747	100.4	742	99.7	744	100.0	748	100.5	758	101.9			
Triadelphia Ridge ES	581	581	581	581	534	91.9	582	100.2	694	119.4	C	716	123.2	C	713	122.7	C	726	125.0	C	725	124.8	C	741	127.5	C	730	125.6	C
West Friendship ES	414	414	414	414	281	67.9	279	67.4	226	54.6	211	51.0	202	48.8	194	46.9	199	48.1	195	47.1	202	48.8	207	50.0	212	51.2			
Region Totals	5242	5242	5242	5242	4279	81.6	4399	83.9	4554	86.9	4565	87.1	4486	85.8	4486	85.8	4492	85.7	4491	85.7	4461	85.1	4472	85.3	4499	85.8			
Countywide Totals	24878	24978	25078	25178	24243	97.8	24945	99.9	25451	101.5	26010	103.3	26323	101.8	26834	103.8	27188	105.2	27529	106.5	27740	104.6	27976	105.5	28236	103.9			

Post-Measures

MIDDLE SCHOOLS - Data for Demonstrative Purposes Only

Aggregate Plan

Capacity Utilization Rates with Proposed FY 2016 Capital Budget Projects - Not Test for APFO

Chart reflects May 2014 Projections, Board of Education's FY 2016 Requested capacities and estimated redistricting.

Capacity					2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26													
	2015	2016	2017	2018	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.												
Columbia - East																																						
Lake Elkhorn MS		643	643	643	554	86.2	563	87.6	604	93.9	622	96.7	626	97.4	620	96.4	625	97.2	624	97.0	611	95.0	611	95.0	610	94.9												
Oakland Mills MS		506	506	506	486	96.0	484	95.7	486	96.0	512	101.2	518	102.4	519	102.6	516	102.0	513	101.4	520	102.8	521	103.0	528	104.3												
Region MS Totals		1149	1149	1149	1149	90.5	1047	91.1	1090	94.9	1134	98.7	1144	99.6	1139	99.1	1141	99.3	1137	99.0	1131	98.4	1132	98.5	1138	99.0												
Columbia - West																																						
Harpers Choice MS		506	506	506	506	110.5	574	113.4	598	118.2	C	592	117.0	C	612	120.9	C	591	116.8	C	616	121.7	C	596	117.8	C	584	115.4	C	587	116.0	C						
Wilde Lake MS	R	467	467	760	760	573	122.7	C	599	128.3	C	670	88.2	C	693	91.2	C	741	97.5	C	740	97.4	C	768	101.1	C	787	103.6	C	834	109.7	C	875	115.1	C	922	121.3	C
Region MS Totals		973	973	1266	1266	1132	116.3	C	1173	120.6	C	1268	100.2		1285	101.5		1353	106.9		1331	105.1		1384	109.3		1383	109.2		1424	112.5		1459	115.2	C	1509	119.2	C
Northeastern																																						
Bonnie Branch MS		662	662	662	662	641	96.8	655	98.9	693	104.7	735	111.0	749	113.1	699	105.6	667	100.8	649	98.0	657	99.2	650	98.2	657	99.2											
Elkridge Landing MS		779	779	779	779	752	96.5	741	95.1	763	97.9	734	94.2	742	95.3	747	95.9	782	100.4	798	102.4	816	104.7	838	107.6	845	108.5											
Ellicott Mills MS	A	662	662	662	662	791	119.5	C	802	121.1	C	840	126.9	C	852	128.7	C	883	107.9	909	111.1	937	114.5	929	113.6	931	113.8	917	112.1	926	113.2							
Mayfield Woods MS		798	798	798	798	666	83.5	698	87.5	757	94.9	780	97.7	851	106.6	863	108.1	901	112.9	916	114.8	964	120.8	C	1007	126.2	C	1021	127.9	C								
New MS #21	NS	0	0	0	0																																	
Thomas Viaduct MS		701	701	701	701	574	81.9	629	89.7	700	99.9	733	104.6	803	114.6	833	118.8	C	891	127.1	C	899	128.2	C	966	137.8	C	1026	146.4	C	1093	155.9	C					
Region MS Totals		3602	3602	3602	3602	3424	95.1	3525	97.9	3753	104.2	3834	106.4	4028	107.2	4051	107.8	4178	111.2	4191	111.5	4334	115.3	C	4438	118.1	C	4542	120.9	C								
Northern																																						
Burleigh Manor MS		779	779	779	779	774	99.4	784	100.6	769	98.7	767	98.5	782	100.4	808	103.7	839	107.7	892	114.5	938	120.4	C	976	125.3	C	999	128.2	C								
Dunloggin MS	A	565	565	565	662	628	111.2	668	118.2	C	674	119.3	C	674	101.8	678	102.4	689	104.1	712	107.6	716	108.2	722	109.1	720	108.8	721	108.9									
Patapsco MS		643	643	643	643	697	108.4	703	109.3	731	113.7	752	117.0	C	768	119.4	C	762	118.5	C	773	120.2	C	753	117.1	C	786	122.2	C	789	122.7	C	812	126.3	C			
Region MS Totals		1987	1987	1987	2084	2099	105.6	2155	108.5	2174	109.4	2193	105.2	2228	106.9	2259	108.4	2324	111.5	2361	113.3	2446	117.4	C	2485	119.2	C	2532	121.5	C								
Southeastern																																						
Hammond MS		604	604	604	604	560	92.7	596	98.7	602	99.7	629	104.1	654	108.3	682	112.9	685	113.4	709	117.4	C	738	122.2	C	758	125.5	C	771	127.6	C							
Murray Hill MS		662	662	662	662	644	97.3	689	104.1	727	109.8	746	112.7	810	122.4	C	843	127.3	C	839	126.7	C	800	120.8	C	792	119.6	C	804	121.5	C	804	121.5	C				
Patuxent Valley MS		760	760	760	760	685	90.1	766	100.8	758	99.7	844	111.1	838	110.3	873	114.9	878	115.5	C	911	119.9	C	948	124.7	C	976	128.4	C	1018	133.9	C						
Region MS Totals		2026	2026	2026	2026	1889	93.2	2051	101.2	2087	103.0	2219	109.5	2302	113.6	2398	118.4	C	2402	118.6	C	2420	119.4	C	2478	122.3	C	2538	125.3	C	2593	128.0	C					
Western																																						
Clarksville MS		643	643	643	643	602	93.6	579	90.0	543	84.4	521	81.0	537	83.5	514	79.9	490	76.2	470	73.1	476	74.0	482	75.0	479	74.5											
Folly Quarter MS		662	662	662	662	606	91.5	610	92.1	632	95.5	649	98.0	706	106.6	710	107.3	704	106.3	700	105.7	723	109.2	732	110.6	719	108.6											
Glenwood MS		545	545	545	545	565	103.7	544	99.8	533	97.8	497	91.2	521	95.6	515	94.5	523	96.0	485	89.0	493	90.5	487	89.4	512	93.9											
Lime Kiln MS		701	701	701	701	720	102.7	728	103.9	722	103.0	724	103.3	774	110.4	779	111.1	786	112.1	788	112.4	804	114.7	811	115.7	C	797	113.7										
Mount View MS		798	798	798	798	762	95.5	779	97.6	796	99.7	832	104.3	848	106.3	867	108.6	855	107.1	875	109.6	882	110.5	922	115.5	C	938	117.5	C									
Region MS Totals		3349	3349	3349	3349	3255	97.2	3240	96.7	3226	96.3	3223	96.2	3386	101.1	3385	101.1	3358	100.3	3318	99.1	3378	100.9	3434	102.5	3445	102.9											
Countywide Totals		13086	13086	13379	13476	12839	98.1	13191	100.8	13598	101.6	13888	103.1	14441	105.9	14563	106.8	14787	108.5	14810	108.6	15191	111.4	15486	113.6	15759	115.6											

'A' includes additions as reflected in FY 2016 CIP for grades 6-8

'R' = Replacement school scheduled to open August 2017

'NS' = New middle school (Thomas Viduct Middle School) underconstruction to open August 2014

Post-Measures

Aggregate Plan

HIGH SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Proposed FY 2016 Capital Budget Projects - Not Test for APFO

Chart reflects May 2014 Projections, Board of Education's FY 2016 Requested capacities and estimated redistricting.

Capacity					2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
	2015	2016	2017	2018	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.	Proj % Util.
Columbia - East															
Oakland Mills HS	1400	1400	1400	1400	1161 82.9	1390 99.3	1429 102.1	1430 102.1	1505 107.5	1519 108.5	1550 110.7	1599 114.2	1601 114.4	1605 114.6	1611 115.1
Columbia - West															
Wilde Lake HS	1424	1424	1424	1424	1335 93.8	1369 96.1	1439 101.1	1483 104.1	1531 107.5	1618 113.6	1629 114.4	1680 118.0	1711 120.2	1709 120.0	1748 122.8
Northeastern															
Howard HS	1420	1420	1420	1420	1867 131.5	1797 126.5	1938 136.5	2070 145.8	2141 150.8	2215 156.0	2265 159.5	2336 164.5	2379 167.5	2369 166.8	2411 169.8
Long Reach HS	1488	1488	1488	1488	1494 100.4	1632 109.7	1728 116.1	1812 121.8	1918 128.9	2036 136.8	2076 139.5	2216 148.9	2283 153.4	2311 155.3	2439 163.9
New HS #13	NS	0	0	0											
Region HS Totals	2908	2908	2908	2908	3361 115.6	3429 117.9	3666 126.1	3882 133.5	4059 139.6	4251 146.2	4341 149.3	4552 156.5	4662 160.3	4680 160.9	4850 166.8
Northern															
Centennial HS	1360	1360	1360	1360	1447 106.4	1495 109.9	1588 116.8	1640 120.6	1651 121.4	1666 122.5	1680 123.5	1688 124.1	1728 127.1	1795 132.0	1846 135.7
Marriotts Ridge HS	1615	1615	1615	1615	1258 77.9	1303 80.7	1374 85.1	1426 88.3	1428 88.4	1464 90.7	1497 92.7	1518 94.0	1545 95.7	1551 96.0	1563 96.8
Mt Hebron HS	1400	1400	1400	1400	1460 104.3	1542 110.1	1583 113.1	1639 117.1	1735 123.9	1755 125.4	1805 128.9	1860 132.9	1852 132.3	1888 134.9	1893 135.2
Region HS Totals	4375	4375	4375	4375	4165 95.2	4340 99.2	4545 103.9	4705 107.5	4814 110.0	4885 111.7	4982 113.9	5066 115.8	5125 117.1	5234 119.6	5302 121.2
Southeastern															
Hammond HS	1220	1220	1220	1220	1307 107.1	1338 109.7	1406 115.2	1480 121.3	1601 131.2	1693 138.8	1779 145.8	1878 153.9	1896 155.4	1969 161.4	2007 164.5
Western															
Atholton HS	1360	1360	1360	1360	1467 107.9	1471 108.2	1550 114.0	1617 118.9	1628 119.7	1700 125.0	1734 127.5	1773 130.4	1824 134.1	1839 135.2	1868 137.4
Glenelg HS	1420	1420	1420	1420	1275 89.8	1239 87.3	1227 86.4	1290 90.8	1278 90.0	1274 89.7	1290 90.8	1290 90.8	1302 91.7	1320 93.0	1309 92.2
Reservoir HS	1551	1551	1551	1551	1547 99.7	1575 101.5	1635 105.4	1761 113.5	1824 117.6	1882 121.3	1944 125.3	2019 130.2	2066 133.2	2113 136.2	2137 137.8
River Hill HS	1488	1488	1488	1488	1286 86.4	1255 84.3	1281 86.1	1276 85.8	1250 84.0	1260 84.7	1249 83.9	1266 85.1	1285 86.4	1271 85.4	1272 85.5
Region HS Totals	5819	5819	5819	5819	5575 95.8	5540 95.2	5693 97.8	5944 102.1	5980 102.8	6116 105.1	6217 106.8	6348 109.1	6477 111.3	6543 112.4	6586 113.2
Countywide Totals	17146	17146	17146	17146	16904 98.6	17406 101.5	18178 106.0	18924 110.4	19490 113.7	20082 117.1	20498 119.5	21123 123.2	21472 125.2	21740 126.8	22104 128.9

PUBLIC SCHOOL ENROLLMENT

ACTUAL FOR 1973-2013 AND ESTIMATED FOR 2014-2027

	Year	Elementary	K-5	Middle	6-8	High	9-12	Sp. Ed. School	Sp Ed.	K-12	
		Enrollment	Change	Enrollment	Change	Enrollment	Change	Enrollment	Change	Enrollment	Change
A C T U A L	1973	10,481	-	5,289	-	6,177	-	30	-	21,977	-
	1974	10,798	317	5,652	363	6,638	461	35	5	23,123	1,146
	1975	10,891	93	6,025	373	7,032	394	44	9	23,992	869
	1976	11,069	178	6,117	92	7,410	378	61	17	24,657	665
	1977	11,246	177	6,175	58	7,957	547	62	1	25,440	783
	1978	10,968	-278	6,080	-95	8,488	531	70	8	25,606	166
	1979	10,627	-341	6,163	83	8,530	42	80	10	25,400	-206
	1980	10,261	-366	6,337	174	8,547	17	83	3	25,228	-172
	1981	9,856	-405	6,409	72	8,468	-79	112	29	24,845	-383
	1982	9,486	-370	6,245	-164	8,387	-81	106	-6	24,224	-621
	1983	9,414	-72	5,988	-257	8,458	71	103	-3	23,963	-261
	1984	9,808	394	5,597	-391	8,723	265	124	21	24,252	289
	1985	10,439	631	5,496	-101	8,900	177	143	19	24,978	726
	1986	11,135	696	5,551	55	8,737	-163	173	30	25,596	618
	1987	12,155	1,020	5,727	176	8,675	-62	191	18	26,748	1,152
	1988	13,225	1,070	5,776	49	8,441	-234	147	-44	27,589	841
	1989	14,160	935	6,235	459	8,305	-136	136	-11	28,836	1,247
	1990	15,001	841	6,603	368	8,248	-57	150	14	30,002	1,166
	1991	15,805	804	7,058	455	8,527	279	70	-80	31,460	1,458
	1992	16,456	651	7,382	324	8,858	331	60	-10	32,756	1,296
	1993	17,155	699	7,958	576	9,107	249	58	-2	34,278	1,522
	1994	17,767	612	8,510	552	9,611	504	62	4	35,950	1,672
	1995	18,226	459	8,843	333	10,181	570	73	11	37,323	1,373
	1996	18,795	569	9,066	223	10,713	532	82	9	38,656	1,333
	1997	19,241	446	9,293	227	11,387	674	89	7	40,010	1,354
	1998	19,849	608	9,669	376	12,020	633	95	6	41,633	1,623
	1999	20,395	546	10,177	508	12,481	461	103	8	43,156	1,523
	2000	20,821	426	10,672	495	12,927	446	105	2	44,525	1,369
	2001	21,000	179	11,138	466	13,479	552	115	10	45,732	1,207
	2002	21,012	12	11,446	308	14,080	601	112	-3	46,650	918
	2003	20,792	-220	11,689	243	14,629	549	101	-11	47,211	561
	2004	20,498	-294	11,754	65	15,235	606	95	-6	47,582	371
	2005	20,412	-86	11,716	-38	15,580	345	87	-8	47,795	213
	2006	20,318	-94	11,889	173	15,858	278	90	3	48,155	360
	2007	20,550	232	11,740	-149	16,094	236	96	6	48,480	325
	2008	20,811	261	11,748	8	16,231	137	98	2	48,888	408
	2009	21,292	481	11,649	-99	16,657	426	85	-13	49,683	795
	2010	21,814	522	11,472	-177	16,614	-43	91	6	49,991	308
	2011	22,246	432	11,523	51	16,627	13	93	2	50,489	498
	2012	22,735	489	11,483	-40	16,660	33	91	-2	50,969	480
	2013	23,327	592	11,890	407	16,378	-282	86	-5	51,681	712
P R O J E C T I O N S	2014	23,828	501	12,336	446	16,527	149	104	18	52,795	1,114
	2015	24,343	515	12,839	503	16,904	377	104	0	54,190	1,395
	2016	24,945	602	13,191	352	17,406	502	104	0	55,646	1,456
	2017	25,451	506	13,598	407	18,178	772	104	0	57,331	1,685
	2018	26,010	559	13,888	290	18,924	746	104	0	58,926	1,595
	2019	26,323	313	14,441	553	19,490	566	104	0	60,358	1,432
	2020	26,834	511	14,563	122	20,082	592	104	0	61,583	1,225
	2021	27,188	354	14,787	224	20,498	416	104	0	62,577	994
	2022	27,529	341	14,810	23	21,123	625	104	0	63,566	989
	2023	27,740	211	15,191	381	21,472	349	104	0	64,507	941
	2024	27,976	236	15,486	295	21,740	268	104	0	65,306	799
	2025	28,236	260	15,759	273	22,104	364	104	0	66,203	897
	2026	28,517	281	15,895	136	22,326	222	104	0	66,842	639
	2027	28,756	239	15,999	104	22,780	454	104	0	67,639	797

Notes: (1) All "actual" enrollments are head count as of September 30th.

(2) "Change" column indicates change from prior year.

(3) Preschool enrollments are not included in these figures.

(4) Cedar Lane School's projected enrollment is based on Cedar Lane School's August 25, 2014 enrollment

ELEMENTARY SCHOOLS - MAY 2014 APFO Test

Capacity Utilization Rates with Board of Education's Approved FY 2015 Capital Budget Projects

Chart reflects May 2013 Projections, Board of Education's Requested FY 2015 capacities, and effects of approved redistricting for the 2014-15 school year as well as proposed redistricting associated with Capital Projects.

	Capacity				2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27				
	2017	2018	2019	2020	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.			
Columbia - East	487	487	487	487	452	92.8	458	94.0	454	93.2	465	95.5	474	97.3	476	97.7	491	100.8	506	103.9	520	106.8	530	108.8			
Cradlerock ES	421	421	421	421	426	101.2	427	101.4	426	101.2	432	102.6	440	104.5	445	105.7	452	107.4	458	108.8	466	110.7	473	112.4			
Jeffers Hill ES	640	640	640	640	585	91.4	571	89.2	566	88.4	567	88.6	571	89.2	580	90.6	589	92.0	593	92.7	600	93.8	605	94.5			
Phelps Luck ES	433	433	433	433	486	112.2	465	107.4	467	107.9	479	110.6	476	109.9	479	110.6	485	112.0	490	113.2	494	114.1	499	115.2			
Stevens Forest ES	443	443	443	443	432	97.5	436	98.4	439	99.1	443	100.0	451	101.8	455	102.7	462	104.3	468	105.6	474	107.0	481	108.6			
Talbott Springs ES	468	468	468	468	459	98.1	460	98.3	457	97.6	463	98.9	469	100.2	470	100.4	479	102.4	487	104.1	493	105.3	502	107.3			
Thunder Hill ES	2892	2892	2892	2892	2840	98.2	2817	97.4	2809	97.1	2849	98.5	2881	99.6	2905	100.4	2958	102.3	3002	103.8	3047	105.4	3090	106.8			
Region Totals	2892	2892	2892	2892	2840	98.2	2817	97.4	2809	97.1	2849	98.5	2881	99.6	2905	100.4	2958	102.3	3002	103.8	3047	105.4	3090	106.8			
Columbia - West	355	355	355	355	402	113.2	413	116.3	C	419	118.0	C	427	120.3	C	440	123.9	C	442	124.5	C	453	127.6	C	461	129.9	
Bryant Woods ES	522	522	522	522	502	96.2	495	94.8	484	92.7	496	95.0	488	93.5	494	94.6	493	94.4	487	93.3	485	92.9	484	92.7			
Clemens Crossing ES	418	418	418	418	412	98.6	431	103.1	443	106.0	442	105.7	448	107.2	456	109.1	461	110.3	464	111.0	469	112.2	474	113.4			
Longfellow ES	515	515	515	515	585	113.6	636	123.5	C	693	134.6	C	749	145.4	C	796	154.6	C	841	163.3	C	898	174.4	C	950	184.5	
Running Brook ES	A	528	628	628	577	109.3	578	92.0	573	91.2	572	91.1	578	92.0	591	94.1	599	95.4	605	96.3	612	97.5	621	98.9			
Swansfield ES	2338	2438	2438	2438	2478	106.0	2553	104.7	2612	107.1	2686	110.2	2750	112.8	2824	115.8	C	2875	117.9	C	2907	119.2	C	2946	120.8		
Region Totals	2338	2438	2438	2438	2478	106.0	2553	104.7	2612	107.1	2686	110.2	2750	112.8	2824	115.8	C	2875	117.9	C	2907	119.2	C	2946	120.8		
Northeastern	762	762	762	762	770	101.0	828	108.7	885	116.1	C	930	122.0	C	961	126.1	C	965	126.6	C	970	127.3	C	956	125.5		
Bellows Spring ES	A	701	701	701	653	93.2	691	98.6	710	101.3	750	107.0	781	111.4	786	112.1	795	113.4	793	113.1	786	112.1	779	111.1			
Deep Run ES	600	600	600	600	826	137.7	C	918	153.0	C	933	155.5	C	937	156.2	C	940	156.7	C	972	162.0	C	975	162.5	C	1005	167.5
Ducketts Lane ES	779	779	779	779	857	110.0	877	112.6	896	115.0	C	908	116.6	C	947	121.6	C	980	125.8	C	987	126.7	C	1007	129.3		
Elkridge ES	617	617	617	617	627	101.6	618	100.2	608	98.5	630	102.1	629	101.9	661	107.1	676	109.6	705	114.3	716	116.0	C	720	116.7		
Ilchester ES	667	667	667	667	524	78.6	528	79.2	534	80.1	531	79.6	546	81.9	598	89.7	631	94.6	651	97.6	657	98.5	641	96.1			
Rockburn ES	788	788	788	788	931	118.1	C	946	120.1	C	941	119.4	C	923	117.1	C	897	113.8	891	113.1	879	111.5	880	111.7			
Veterans ES	594	594	594	594	641	107.9	659	110.9	667	112.3	687	115.7	C	685	115.3	C	694	116.8	C	702	118.2	C	714	120.2			
Waterloo ES	516	516	516	516	578	112.0	579	112.2	579	112.2	562	108.9	569	110.3	579	112.2	588	114.0	599	116.1	C	610	118.2	C	620	120.2	
Worthington ES	6024	6024	6024	6024	6407	106.4	6644	110.3	6753	112.1	6858	113.8	6955	115.5	C	7115	118.1	C	7200	119.5	C	7261	120.5	C	7335	121.8	
Region Totals	6024	6024	6024	6024	6407	106.4	6644	110.3	6753	112.1	6858	113.8	6955	115.5	C	7115	118.1	C	7200	119.5	C	7261	120.5	C	7335	121.8	
Northern	628	628	628	628	796	126.8	C	800	127.4	C	834	132.8	C	850	135.4	C	842	134.1	C	855	136.1	C	860	136.9	C	861	137.1
Centennial Lane ES	688	688	688	688	705	102.5	715	103.9	728	105.8	747	108.6	755	109.7	795	115.6	C	829	120.5	C	847	123.1	C	863	125.4		
Hollifield Station ES	647	647	647	647	679	104.9	783	121.0	C	875	135.2	C	1000	154.6	C	1112	171.9	C	1183	182.8	C	1242	192.0	C	1285	198.6	
Manor Woods ES	672	672	672	672	704	104.8	717	106.7	710	105.7	730	108.6	735	109.4	746	111.0	764	113.7	775	115.3	C	799	118.9	C	816	121.4	
Northfield ES	597	597	597	597	574	96.1	576	96.5	587	98.3	602	100.8	610	102.2	624	104.5	635	106.4	642	107.5	647	108.4	670	112.2			
St Johns Lane ES	A	775	775	775	657	84.8	625	80.6	625	80.6	638	82.3	639	82.5	652	84.1	662	85.4	677	87.4	703	90.7	728	93.9			
Waverly ES	4007	4007	4007	4007	4115	102.7	4216	105.2	4359	108.8	4567	114.0	4693	117.1	C	4855	121.2	C	4992	124.6	C	5087	127.0	C	5192	129.6	
Region Totals	4007	4007	4007	4007	4115	102.7	4216	105.2	4359	108.8	4567	114.0	4693	117.1	C	4855	121.2	C	4992	124.6	C	5087	127.0	C	5192	129.6	
Southeastern	387	387	387	387	398	102.8	401	103.6	414	107.0	420	108.5	424	109.6	433	111.9	439	113.4	445	115.0	C	452	116.8	C	461	119.1	
Atholton ES	663	663	663	663	891	134.4	C	953	143.7	C	999	150.7	C	1044	157.5	C	1050	158.4	C	1035	156.1	C	1019	153.7	C	999	150.7
Bollman Bridge ES	626	626	626	626	866	138.3	C	865	138.2	C	888	141.9	C	910	145.4	C	925	147.8	C	925	147.8	C	933	149.0	C	935	149.4
Forest Ridge ES	713	713	713	713	734	102.9	733	102.8	725	101.7	713	100.0	722	101.3	727	102.0	696	97.6	699	98.0	704	98.7	707	99.2			
Gorman Crossing ES	462	462	462	462	494	106.9	492	106.5	479	103.7	492	106.5	493	106.7	496	107.4	500	108.2	506	109.5	511	110.6	513	111.0			
Guilford ES	597	597	597	597	585	98.0	595	99.7	611	102.3	629	105.4	671	112.4	693	116.1	C	723	121.1	C	751	125.8	C	782	131.0		
Hammond ES	A	640	640	640	592	92.5	594	92.8	590	92.2	588	91.9	603	94.2	616	96.3	636	99.4	645	100.8	650	101.6	652	101.9			
Laurel Woods ES	4088	4088	4088	4088	4560	111.5	4633	113.3	4706	115.1	C	4796	117.3	C	4888	119.6	C	4925	120.5	C	4940	120.8	C	4978	121.8		
Region Totals	4088	4088	4088	4088	4560	111.5	4633	113.3	4706	115.1	C	4796	117.3	C	4888	119.6	C	4925	120.5	C	4940	120.8	C	4978	121.8		
Western	788	788	788	788	486	61.7	470	59.6	468	59.4	479	60.8	472	59.9	492	62.4	487	61.8	496	62.9	505	64.1	507	64.3			
Bushy Park ES	634	634	634	634	323	50.9	290	45.7	293	46.2	303	47.8	300	47.3	312	49.2	306	48.3	304	47.9	309	48.7	313	49.4			
Clarksville ES	788	788	788	788	490	62.2	459	58.2	430																		

MIDDLE SCHOOLS - MAY 2014 APFO Test

Capacity Utilization Rates with Board of Education's Approved FY 2015 Capital Budget Projects

Chart reflects May 2013 Projections, Board of Education's Requested FY 2015 capacities, and effects of approved redistricting for the 2014-15 school year as well as proposed redistricting associated with Capital Projects.

Capacity					2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		
	2017	2018	2019	2020	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	
Columbia - East	2017	2018	2019	2020																					
Lake Elkhorn MS	643	643	643	643	520	80.9	530	82.4	545	84.8	545	84.8	550	85.5	548	85.2	560	87.1	568	88.3	564	87.7	570	88.6	
Oakland Mills MS	506	506	506	506	508	100.4	554	109.5	570	112.6	566	111.9	544	107.5	547	108.1	554	109.5	560	110.7	563	111.3	574	113.4	
Region MS Totals	1149	1149	1149	1149	1028	89.5	1084	94.3	1115	97.0	1111	96.7	1094	95.2	1095	95.3	1114	97.0	1128	98.2	1127	98.1	1144	99.6	
Columbia - West																									
Harpers Choice MS	506	506	506	506	606	119.8	C	611	120.8	C	606	119.8	C	605	119.6	C	620	122.5	C	608	120.2	C	603	119.2	C
Wilke Lake MS	623	623	623	623	691	110.9		707	113.5		736	118.1	C	720	115.6	C	740	118.8	C	764	122.6	C	818	131.3	C
Region MS Totals	1129	1129	1129	1129	1297	114.9		1318	116.7		1342	118.9		1325	117.4		1360	120.5		1372	121.5		1421	125.9	
Northeastern																									
Bonnie Branch MS	662	662	662	662	709	107.1		722	109.1		737	111.3		692	104.5		682	103.0		646	97.6		676	102.1	
Elkridge Landing MS	779	779	779	779	747	95.9		733	94.1		739	94.9		737	94.6		767	98.5		777	99.7		783	100.5	
Ellicott Mills MS	662	662	662	662	873	131.9	C	876	132.3	C	899	135.8	C	933	140.9	C	970	146.5	C	967	146.1	C	959	144.9	C
Mayfield Woods MS	798	798	798	798	749	93.9		769	96.4		797	99.9		794	99.5		824	103.3		839	105.1		874	109.5	
Thomas Viaduct MS	662	662	662	662	602	90.9		613	92.6		626	94.6		630	95.2		654	98.8		675	102.0		705	106.5	
Region MS Totals	3563	3563	3563	3563	3680	103.3		3713	104.2		3798	106.6		3786	106.3		3897	109.4		3904	109.6		3997	112.2	
Northern																									
Burleigh Manor MS	779	779	779	779	768	98.6		770	98.8		780	100.1		782	100.4		818	105.0		855	109.8		904	116.0	C
Dunloggin MS	565	565	662	662	674	119.3	C	667	118.1	C	665	100.5		664	100.3		692	104.5		683	103.2		692	104.5	
Patapsco MS	643	643	643	643	760	118.2	C	761	118.4	C	719	111.8		688	107.0		682	106.1		678	105.4		698	108.6	
Region MS Totals	1987	1987	2084	2084	2202	110.8		2198	110.6		2164	103.8		2134	102.4		2192	105.2		2216	106.3		2294	110.1	
Southeastern																									
Hammond MS	604	604	604	604	587	97.2		607	100.5		623	103.1		652	107.9		664	109.9		696	115.2	C	725	120.0	C
Murray Hill MS	662	662	662	662	731	110.4		760	114.8		776	117.2	C	807	121.9	C	789	119.2	C	775	117.1	C	789	119.2	C
Patuxent Valley MS	760	760	760	760	732	96.3		772	101.6		800	105.3		833	109.6		851	112.0		888	116.8	C	955	125.7	C
Region MS Totals	2026	2026	2026	2026	2050	101.2		2139	105.6		2199	108.5		2292	113.1		2304	113.7		2359	116.4		2469	121.9	
Western																									
Clarksville MS	643	643	643	643	511	79.5		489	76.0		449	69.8		381	59.3		325	50.5		320	49.8		339	52.7	
Folly Quarter MS	662	662	662	662	605	91.4		596	90.0		592	89.4		557	84.1		531	80.2		523	79.0		554	83.7	
Glenwood MS	545	545	545	545	494	90.6		466	85.5		462	84.8		449	82.4		443	81.3		418	76.7		432	79.3	
Lime Kiln MS	701	701	701	701	673	96.0		664	94.7		679	96.9		667	95.1		644	91.9		637	90.9		659	94.0	
Mount View MS	798	798	798	798	687	86.1		726	91.0		715	89.6		685	85.8		659	82.6		665	83.3		712	89.2	
Region MS Totals	3349	3349	3349	3349	2970	88.7		2941	87.8		2897	86.5		2739	81.8		2602	77.7		2563	76.5		2696	80.5	
Countywide Totals	13203	13203	13300	13300	13227	100.2		13393	101.4		13515	101.6		13387	100.7		13449	101.1		13509	101.6		13991	105.2	

A: capacity includes additions as reflected in FY 2015 CIP for Grades 6-8 between 2014 and 2020

NS: New Middle School (Thomas Viaduct MS) under construction to open in August 2014.

R: Replacement school scheduled to open August 2017.

Fully Funded Projects in Process

Project Name	Project Number	Appropriation	Proposed Completion	Project Status
Planning				
Wilde Lake MS	E1031	\$ 10,858,000	2017	In design; Design Documents.
Maintenance Warehouse	E1011	\$ 1,100,000	2017	Planning deferred.
Patuxent Valley MS Renovation	E1033	\$ 8,145,000	2017	In design; Construction Documents.
Old Cedar Lane Renovation/Addition	E1004	\$ 1,320,000	2018	Planning deferred.
Swansfield ES Renovation/Addition	E1034	\$ 1,898,000	2018	Planning.
Construction				
Atholton HS Renovation/Addition	E1015	\$ 61,069,000	2015	Under construction
Longfellow ES Renovation	E1027*	\$ 18,517,000	2015	Under construction
Laurel Woods ES	E1032	\$ 8,023,000	2015	Under construction
Deep Run ES	E0980	\$ 20,154,000	2016	Under construction

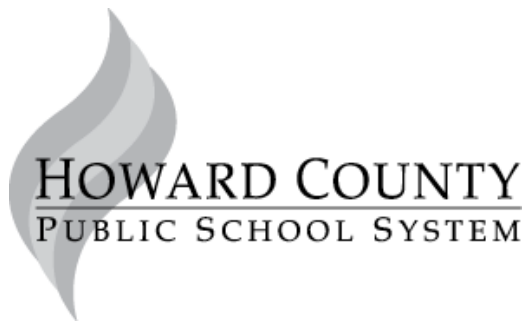
* Planning funds appropriated under E-0980.

Facilities Constructed With Assistance From Maryland School Construction Funds (1980 through 2014)

Completion (School year)	Elementary	Middle	High	Special
1980-1981	-	-	-	-
1981-1982	-	-	-	Cedar Lane
1988-1989	Bollman Bridge	-	-	-
1989-1990	-	Patuxent Valley	-	-
1990-1991	Deep Run	-	-	-
	Waverly	-	-	-
1991-1992	Pointers Run	Mayfield Woods	-	-
1992-1993	Elkridge	Burleigh Manor	-	-
	Forest Ridge	-	-	-
1993-1994	Rockburn	Mount View	-	-
1994-1995	Manor Woods	-	River Hill	-
1995-1996	-	Elkridge Landing	-	-
1996-1997	Ilchester	-	Long Reach	-
	-	-	Wilde Lake (Replaceme	-
1997-1998	Fulton	Murray Hill	-	-
	Hollifield Station	-	-	-
1998-1999	Gorman Crossing	-	-	-
	Triadelphia Ridge	-	-	-
1999-2000	-	Bonnie Branch	-	-
	-	Lime Kiln	-	-
2001-2002	-	Ellicott Mills (Replaceme	-	-
2002-2003	-	-	Reservoir	Homewood
2003-2004	Bellows Spring	Folly Quarter	-	-
2005-2006	-	-	Marriotts Ridge	Cedar Lane
2006-2007	Dayton Oaks	-	-	-
2007-2008	Veterans	-	-	-
	Bushy Park Replacerr	-	-	-
2013-2014	Ducketts Lane	-	-	-
2014-2015	-	Thomas Viaduct	-	-

**Additions/Renovations Constructed With Assistance
From Maryland School Construction Funds
(1980 through 2014)**

Completion (School year)	Elementary	Middle	High	Special
1980-1981	Atholton	-	-	-
	Clarksville	-	-	-
1981-1982	Guilford	Waterloo (Relocatables)	-	-
1983-1984	-	-	Mt. Hebron (Stage B, Phase	-
1985-1986	-	-	-	School of Technology
1986-1987	Guilford	-	-	-
1987-1988	-	-	Atholton (Stage B, Phase II)	-
1991-1992	-	-	Oakland Mills	-
1994-1995	Northfield	Owen Brown	-	-
	Centennial Lane	-	-	-
	Dasher Green	-	-	-
1995-1996	-	Wilde Lake	-	-
	-	Oakland Mills	-	-
1996-1997	Hammond	-	Hammond	-
1998-1999	Swansfield	Dunloggin	-	-
	Jeffers Hill	-	-	-
	Waterloo	-	-	-
2000-2001	Ilchester	-	-	-
	Pointers Run	-	-	-
	St. John's Lane	-	-	-
	Talbott Springs	-	-	-
2001-2002	Forest Ridge	-	-	-
	Pointers Run	-	-	-
2002-2003	Atholton	-	Centennial	-
	Clarksville	-	-	-
	Hollifield Station	-	-	-
2003-2004	Fulton	Patapsco	Atholton	-
2004-2005	Manor Woods	Clarksville	Mt. Hebron	-
	Rockburn	-	Oakland Mills	-
2006-2007	Clarksville	-	Howard	-
	Fulton	-	-	-
	Pointers Run	-	-	-
	Triadelphia Ridge	-	-	-
	All Day K (Phase III) (4)	-	-	-
2007-2008	All Day K (Phase IV) (11)	-	-	-
	Waverly	-	-	-
	Centennial Lane(Reno)	-	-	-
	Clarksville	-	-	-
2008-2009	All Day K (Phase V) (7)	Clarksville	Glenelg	-
	Centennial Lane(Add)	-	-	-
	Worthington Reno.	-	-	-
2009-2010	All Day K (Phase VI) (7)	-	-	-
	Clemens Crossing (Reno)	-	-	-
	Waterloo (Reno)	-	-	-
2010-2011	Northfield	-	Mt. Hebron	-
2011-2012	Hammond	Hammond	Hammond Dance Studio	-
	Bellows Spring	-	Centennial Dance Studio	-
2012-2013	Thunder Hill	-	-	-
2013-2014	Bollman Bridge	-	-	-
	Gorman Crossing	-	-	-
	Phelps Luck	-	-	-
	Stevens Forest	-	-	-
2014-2015	Running Brook	-	-	-



BOARD OF EDUCATION
POLICY 6020
SCHOOL PLANNING/SCHOOL
CONSTRUCTION PROGRAMS

Effective: July 1, 2010

I. Policy Statement

The Board of Education is responsible for providing safe and nurturing educational and work environments for all students and staff. The Board recognizes the continuing need to plan, design, and construct new educational facilities and to renovate or make additions to existing schools that are in accordance with all applicable code, as well as Maryland and federal law. Fulfilling this responsibility requires a comprehensive program that monitors population trends, enrollment trends, educational program spatial requirements, cost/benefit considerations, technologies that support environmentally responsible construction, and an annual six-year capital improvement program.

II. Purpose

The purpose of the policy is to establish guidelines for the administration of the School Planning and the School Construction programs.

III. Definitions

Within the context of this policy, the following definitions apply:

- A. Architect/Engineering Firm (A/E) – A designation usually reserved by law for a person or organization professionally qualified and duly licensed to perform architectural and/or engineering services including, but not necessarily limited to, analysis of project requirements; creation and development of the project design; preparation of drawings, specifications, and bidding requirements; and general administration of the construction contract.
- B. Beneficial Occupancy – The use by the owner of a project or portion thereof before all the terms of the contract are complete.
- C. Bid – The price a contractor commits to for constructing a project.
- D. Bid Procedures – Criteria to determine the award of a contract pursuant to Policy 4050 Procurement of Capital Materials, Supplies, Equipment, and Services.
- E. Bonds – General obligation documents issued by the county to borrow money to fund capital projects.

- F. Capital Improvement Program (CIP) – All capital improvements listed as part of the Board’s annual approved capital budget.
- G. Capital Improvement Project – Any physical betterment or improvement and any preliminary studies and surveys relative thereto, including but not limited to, any property of a permanent nature, and equipment needed in connection with such improvement when first erected or acquired.
- H. Change Order – A written document to the contractor signed by the owner and engineer or architect, issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum.
- I. Construction Manager (CM) – A person or organization hired to coordinate and manage the construction phases of a project with the objective of minimizing project construction time and cost while maintaining the quality, function, and aesthetics of the building.
- J. Design Stages – The three phases of an architect’s basic services, which include:
 - 1. Schematic Design (SD) – the first phase of the architect's basic services. In this phase, the architect meets with the project planning team to ascertain the requirements of the project and prepares schematic design studies consisting of drawings and other documents illustrating the scale and relationship of the project components for approval by the Board. A statement of probable construction cost is also submitted at this time.
 - 2. Design Development (DD) – the second phase of the architect's basic services. In this phase the architect prepares, from the approved schematic design studies, the design development documents for approval by the Board. These design documents consist of drawings and other documents to fix and describe the size and character of the entire project as to structural, mechanical and electrical systems, materials and other essentials as may be appropriate. The architect also submits to the Board a further statement of probable construction costs.
 - 3. Construction Documents (CD) – the third phase of the architect's basic services. In this phase the architect prepares, from the approved design development documents, the working drawings, specifications, and necessary bidding information for approval by the Board. A final cost estimate is prepared before the project is bid.
- K. Facility Design – Plans, elevations, sections, and other drawings and specifications that may be necessary for a building or other structure.

- L. Facility Planning – Educational and architectural planning and analysis used to produce and design the concept for school projects.
- M. Final Occupancy – The point at which all or a designated portion of a building complies with the provisions of a contract and all applicable county and state statutes and regulations.
- N. Interagency Committee on School Construction (IAC) – The state agency responsible for the review/approval of construction documents and funding of schools or school construction projects.
- O. Office of Safety, Environment and Risk Management – The office that is responsible for reviewing and monitoring the design and construction phases related to environmental initiatives, such as Integrated Pest Management (IPM), Indoor Air Quality (IAQ), and Asbestos Abatement.
- P. Office of School Construction – The office that is responsible for all phases of planning, design and construction of new schools as well as additions to and comprehensive modernization of existing schools, from planning through occupancy.
- Q. Office of School Planning – The office that is responsible for projecting needs based on demographics for the purpose of assisting the Superintendent in the development of the Capital Improvement Program.
- R. Punch List – List made near the completion of work, indicating items to be furnished or work to be performed by the contractor or subcontractor in order to complete the work as specified in the contract documents.
- S. State of Maryland Public School Construction Program (PSCP) – Program that provides for the funding of public school construction.
- T. Sustainable Design – Design that seeks to reduce negative impacts on the environment and the health and comfort of building occupants, thereby improving building performance. The objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments.
- U. Warranty/Guarantee Period – Period of time in which the quality of work and/or satisfactory performance is guaranteed.

IV. Standards

- A. This policy and associated implementation procedures apply to the capital improvement projects that are listed as part of the Board's annual approved capital budget requiring contracts and consultant agreements.
- B. The Howard County Public School System (HCPSS) employs sustainable design construction that supports educational program needs and creates a safe and nurturing environment for students and staff within allotted budgetary resources.
- C. The school planning/school construction program involves a sequential plan of action and is divided into ten general categories, each requiring professionally trained and experienced staff to plan and carry out the requirements of the program consistent with the Superintendent's Safety Guidelines for Renovation and Construction Projects and all applicable regulations.
 - 1. Long-Range Planning and Student Population Projection
 - a. This category involves the annual projection of pupil population and general population growth by the Office of School Planning. Short-range demographic studies to support the Capital Improvement Program, school attendance area studies, transportation planning, and other special needs are also included.
 - b. By state regulation the Board is also required to develop, maintain, and annually update a master plan for the school system for submission to the IAC. This plan has as its basis a variety of population studies which guide the decision making for school facilities on both a long and short-term basis.
 - 2. Capital Improvement Program
 - a. The Capital Improvement Program is a projection of the school facility needs for the next fiscal year (Capital Budget) and the following five-year period. The Capital Improvement Program is based on needs to support the educational program of the system with new schools, modernizations, and other construction projects.
 - b. The local Capital Improvement Program serves as the basis for state funding requests through the Interagency Committee for School Construction and the State of Maryland Public School Construction Program.

3. Site Selection

Procedures for site selection and summarization of site size criteria for elementary, middle and high schools are addressed in Policy 6000 Site Selection and Acquisition. As part of the selection process, the Office of School Construction produces studies including site layouts and environmental assessments.

4. Architect/Engineering Firm and Construction Manager Selection

Procedures for architectural/engineering and construction management services selection are addressed in Policy 6030 Procurement of Architectural/Engineering and Construction Management Services.

5. Facility Planning and Facility Design

The facility planning and design process allows for orderly and systematic design of school facilities. This process is conducted using either the Board-approved General Elementary Educational Specifications for New Schools, General Educational Specifications for New Howard County Middle Schools, General Educational Specifications High Schools, or the Board approved Guidelines Manual for Renovations and Modernizations of Existing Schools as the basic references for the facility in question. These documents describe the basic educational philosophy, instructional program, and spatial requirements needed to implement the planning and construction program.

6. Bid and Award

The bid and award procedures for school construction projects conform to those used for the procurement of other goods and services which are addressed in Policy 4050. In addition, these procedures comply with the requirements of the State of Maryland Public School Construction Program.

7. Contract and Construction Administration

The Office of School Construction is responsible for monitoring construction work and administering the schedule, budget, and change orders that affect the scope and/or cost of the work. A school construction progress report which includes these topics is submitted monthly to the Board.

In accordance with the provisions of Policy 6030, a construction manager may be hired to manage the construction process.

8. Official Acceptance of Capital Improvement Projects

Capital improvement projects may be designed to be accepted in stages or upon total completion of work, based on staff recommendation to and approval by the Board.

9. Post-Acceptance Evaluation

Use, occupancy, and evaluation by staff may occur only after the project has been officially accepted. The Board will receive a final report following the walk-through.

10. Temporary and Relocatable Facilities

Relocatable classroom units should be considered under the following conditions and within the context of Policy 6010 School Attendance Areas:

- a. Where school population growth occurs
- b. Where school capacity is near maximum
- c. When boundary lines are adjusted
- d. Where population is projected to remain high for at least one year
- e. Where school construction or renovation projects require the provision of swing space to accommodate the student population and minimize the impact on instruction.

Where excess population is projected to remain beyond four years, consideration should be given to an addition or new construction.

- D. To the extent possible, school facilities and sites should be available for after school use by the community. The possibility of joint use development of school and recreational facilities, including joint construction of school and recreational space, is encouraged on a case-by-case basis.

V. Compliance

- A. The Superintendent/Designee is responsible for the administration of the school planning and construction programs.
- B. The Office of School Planning and the Office of School Construction are responsible for collaboration in order to obtain the efficient implementation of this policy.
- C. For Capital Improvement Projects, the Principal is responsible for communicating project information to the parent community in a timely manner.

VI. Delegation of Authority

The Superintendent is authorized to develop appropriate procedures to implement this policy.

VII. References

A. Legal

The Annotated Code of Maryland, Education Article

§ 3-602.1 (requirements to design high performance buildings)

§ 4-115 (right to acquire land, school sites or buildings)

§ 4-116 (land use approval procedures)

§ 4-117 (construction and remodeling conformance to state and county building codes)

§ 5-301 (Board of Public Works role and procedures in school construction)

§ 5-302 (composition and role of the IAC in school construction)

§ 5-303 (procedure for determining the cost of renovating existing schools)

§ 5-312 (state funding support related to high performance buildings)

§ 7-108 (guidelines for community use of public school facilities)

§ 7-109 (use of public school facilities as day care centers)

COMAR 13A.01.02.03 (requirements for obtaining State Superintendent's approval for school construction projects)

COMAR 15.05.02 (regulations pertaining to integrated Pest Management and Notification of Pesticide Use in a Public School Building or on School Grounds)

Americans with Disabilities Act (ADA)

Occupational Safety and Health Act (OSHA)

Maryland Occupational Safety and Health Act (MOSHA)

B. Other Board Policies

Policy 4050 Procurement of Capital Materials, Supplies, Equipment, and Services

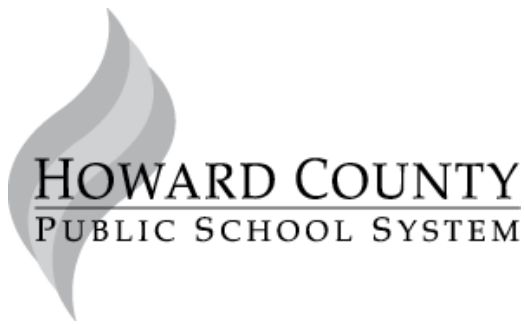
Policy 6000 Site Selection and Acquisition

Policy 6010 School Attendance Areas

Policy 6030 Procurement of Architectural/Engineering and Construction Management Services

- C. Other
General Elementary Educational Specifications for New Schools
General Educational Specifications for New Howard County Middle Schools
General Educational Specifications High Schools
Guidelines Manual for Renovations and Modernizations of Existing Schools
Safety Guidelines for Renovation and Construction Projects

ADOPTED: September 4, 1968
AMENDED: September 13, 1990
January 14, 2010
EFFECTIVE: July 1, 2010



POLICY 6020-PR
IMPLEMENTATION PROCEDURES
SCHOOL PLANNING/SCHOOL
CONSTRUCTION PROGRAMS

Effective: July 1, 2010

These procedures apply to the construction of new schools and the modernization/renovation of existing facilities that are included in the Board's Capital Improvement Program.

I. Long-range Planning and Student Population Projection

The Office of School Planning will:

- A. Gather enrollment, population, and housing data from appropriate sources
- B. Provide an annual projection using the cohort survival method or other established demographic methodology
- C. Provide an annual report of projection accuracy to the Board of Education.

II. Capital Improvement Program

The Office of School Planning and the Office of School Construction will:

- A. Develop the Capital Improvement Program based on population growth and anticipated needs of that population
- B. Present the Board's requested six-year Capital Improvement Program, which includes a request for the next fiscal year (capital budget) and the following five-year period
- C. Prepare the State of Maryland Public School Construction Program (PSCP) budget funding request
- D. Incorporate the state budget request with the Board six-year Capital Improvement Program to determine the annual county Capital Improvement Program request
- E. Select and analyze site(s).

III. Site Selection

Site selection and acquisition is recommended to the Board after being analyzed for appropriateness for a school. (See Policy 6000 Site Selection and Acquisition.)

IV. Architect/Engineering Firm and Construction Manager Selection

Procurement of architectural/engineering and construction management services are recommended to and approved by the Board in compliance with Policy 6030
Procurement of Architectural/Engineering and Construction Management Services.

V. Facility Planning and Facility Design

A facility planning team is convened, consisting of school and community members, personnel from the Office of School Construction, a designee from the Office of Safety, Environment and Risk Management, other central office personnel, the project architect, and others who may be named by the Superintendent/Designee. The planning team provides input to the architect in developing a series of three design studies that meets Board policy as well as the objectives of the applicable educational specifications or renovation guidelines.

The series of three design studies is as follows:

- A. Schematic Design Phase
 - 1. Planning team named by the Superintendent/Designee
 - 2. Description of conceptual design
 - 3. Initial cost analysis
 - 4. Presentation to and approval by the Board.
- B. Design Development Phase
 - 1. Description of the design
 - 2. Detailed layouts of subject areas
 - 3. Cost analysis
 - 4. Presentation to and approval by the Board.
- C. Construction Documents Phase
 - 1. Description of the final design
 - 2. Cost analysis and cost reduction
 - 3. Final review of drawings and specifications
 - 4. Presentation to and approval by the Board
 - 5. Preparation of bid documents.

The above steps may be combined. In each phase, the effect on the occupants, the building structure, and/or systems is considered. Each phase is submitted for review and approval by the Board and the Interagency Committee on School Construction (IAC). Copies of the Howard County Public School System (HCPSS) response to the design

submission review letters from the IAC approving agencies will also be submitted to the Board

VI. Bid and Award

Pursuant to Policy 4050 Procurement of Capital Materials, Supplies, Equipment, and Services, these procedures call for a publicly announced bid period during which interested bidders examine the bid documents and submit a sealed bid by the date and time required. The bid documents are opened in public and the price submitted for each bid item is read aloud. At a subsequent meeting of the Board, the results of the bid are presented and a recommendation to award to the lowest responsible and responsive bidder is made.

The final decision is made by the Board. Upon submission of all documents, bonds, and other matters required in the contract, a formal contract is signed.

VII. Contract and Construction Administration

A. Office of School Construction

The project architect serves as the Board's representative and administers the contract, answers technical questions, approves submittals, and initiates change orders and requests for proposals subject to the Board's approval. The Office of School Construction coordinates the completion schedule with the principal/designee and other school system personnel to ensure that furniture and equipment deliveries, technology services, and food services satisfy the requirements for their respective sections. Prior to the opening of school, the Office of School Construction monitors each project to resolve any last minute problems and continues this supervision during the warranty period.

The Office of School Construction supervises the construction, budget, schedule, and quality of work, administers change order requests, and administers the warranty period. When school projects are technically complex, have a very short construction time, or require staff attention beyond the time available, a construction manager may be hired to manage the construction process.

B. Office of Safety, Environment and Risk Management

The Office of Safety, Environment and Risk Management monitors the design and construction phases at regular intervals and in response to specific concerns. Consistent with all statutory requirements, monitoring includes Integrated Pest Management (IPM), Indoor Air Quality (IAQ), and abatement of potentially hazardous materials.

VIII. Official Acceptance of Capital Improvement Projects

New facilities and other Capital Improvement Projects may be accepted in several ways. If conditions permit, the school system will wait until all major and minor building system corrections are fully complete and all minor repairs, deficiencies and discrepancies (punch list items) have been corrected. The project architect will then certify that the building is complete and has been constructed according to the drawings and specifications. This marks the beginning of the warranty period for the building. School facilities are typically scheduled so that all construction will be complete and the building ready for acceptance in early summer. Final inspection and acceptance involves a review of the project at substantial completion of construction, which includes listing items to be adjusted, corrected, or completed by the contractor's "punch list." In most cases, the project is complete except for minor system work and completion of the punch list items by late summer.

The Office of School Construction is responsible for certifying, as applicable, beneficial occupancy, final occupancy, move-in, punch list, and warranty/guarantee.

IX. Post-Acceptance Evaluation

- A. After project acceptance, furnishings and movable equipment can be installed, supplies can be delivered and stored, and the staff can occupy the facility for operation. At this time, the construction project enters into a one year guarantee and a two year mechanical/electrical guarantee period during which time discrepancies in the workmanship, materials, and equipment supplied under the contract are noted and corrected. Some specifically identified warranties/guarantees may be longer than one to two years.
- B. Following the move-in, the Office of School Construction works closely with the school administration and maintenance personnel to correct any problems that arise during the warranty period.
- C. After the first instructional year following construction, a walk-through of the facility is conducted to evaluate the success of the facility as a teaching environment and the success of the educational concepts in the General Elementary Educational Specifications for New Schools, or General Educational Specifications for New Howard County Middle Schools, or General Educational Specifications High Schools or Guidelines Manual for Renovations and Modernizations of Existing Schools in effect at the time the project was designed. The facility is also evaluated as to use of materials, building systems, construction quality, and other aspects pertaining to the building.

- D. A walk-through of the building by a representative team of stakeholders may include a:
1. Teacher representative
 2. Administration personnel
 3. Custodian
 4. PTA representative
 5. School facilities representative(s)
 6. Designee from Safety, Environment and Risk Management.

X. Temporary and Relocatable Facilities

Placement of temporary and relocatable portable facilities is determined by and implemented as follows:

- A. Presentation of current population projections
- B. Identification of where new units are needed
- C. Evaluation of site plans
- D. Evaluation of cost implications
- E. Presentation to and approval by the Board
- F. Reassignment or procurement of units
- G. Installation of units
- H. Post installation inspection by the Office of School Construction.

ADOPTED: September 13, 1990

AMENDED: January 14, 2010

EFFECTIVE: July 1, 2010

Glossary of Terms

ADA: Americans with Disabilities Act.

ADDITION (SCHOOL): A school addition is defined as any type of space that adds capacity or provides space for a new program.

BUILDING: A structure, either permanent or relocatable, consisting of constructed walls, roof, and floor. A structure that has the same floors, ceiling, and walls and is not separated by an open air space is considered one building.

PERMANENT: A structure built with a fixed foundation that has permanently attached walls, roof, and floor that cannot be moved or transported either as a unit or in sections.

RELOCATABLE: A building or portion of a building made up of prefabricated units that may be disassembled and reassembled frequently, or a single unit of construction consisting of walls, roof, and floor that is movable as a unit either on wheels or by truck. Mobile, demountable, dividable, modular, and portable buildings are types of relocatable units.

CAFETORIUM: A space within an educational facility that is used as both a cafeteria and an auditorium.

CAPACITY: Number of students that may be housed in a facility at any given time based on a utilization percentage of the total number of existing satisfactory student stations.

CIP: Capital Improvement Program

CLASSROOM: An instructional space requiring no special design or equipment and used for housing general programs such as language arts, social studies, and mathematics.

CLEAN AIR ACT: This program includes projects to convert or replace cooling equipment in school facilities so that they will no longer use ozone-depleting refrigerants.

COMAR: Code of Maryland Regulations.

COURTYARD: A large open space, usable by the student body or faculty, enclosed or surrounded by buildings.

COVERED WALKWAY: Enclosed or unenclosed covered passageways connected to a building outside the exterior walls.

EDUCATIONAL FACILITIES: "Educational facilities" means the buildings and equipment, structures, and special educational use areas that are built, installed, or established to serve primarily the educational purposes and secondarily the social and recreational purposes of the community and which may lawfully be used as authorized by the Maryland Statutes and approved by boards.

FEASIBILITY STUDY: The examination and analysis of information related to projected educational facilities to determine whether they are reasonable and possible.

FY: Fiscal Year.

G.S.F.: Gross Square Feet.

GYMNASIUM: An instructional area designed or adapted specifically for physical education activities. Regular or special classrooms connected to, or contained in, gymnasiums are recorded individually as regular or special classrooms and not as part of the gymnasium.

GYMNATORIUM: A space within an educational facility that is used both as a gym and an auditorium.

HVAC: Heat, ventilation, air conditioning, and refrigeration.

Glossary of Terms

KINDERGARTEN CLASSROOM: A special classroom designed or provided with special built-in equipment for use by a group or class organized to provide educational experiences for children preceding the first grade. Room must not be located above the first floor and must have self-contained rest rooms.

LABORATORY: An instructional area designed for and furnished with specialized equipment to serve the needs of a particular program of study. Included in this category are science laboratories, language laboratories, reading laboratories, and vocational/technology laboratories.

LEED: Leadership in Energy and Environmental Design is a green building certification program.

LIMITED RENOVATION (LR): Includes projects that upgrade or replace a minimum of five major building systems and include widespread educational or architectural enhancements in schools or part(s) of schools that have been in use for more than 15 years. A limited renovation upgrades an existing building and site, or a portion of a building and site, to achieve many, but not all, of the current educational, building performance, and aesthetic qualities of a new school. A limited renovation allows further participation by the State within 15 years after the project is placed in service for projects that were not included in the original awarded scope of the Limited Renovation.

LONG-RANGE PLANNING: Devising a systematic method based on educational information and needs, carefully analyzed, to provide the facilities to meet the goals and objectives of the educational agency for a period of five years.

MAINTENANCE AND REPAIRS: The upkeep of educational and ancillary plants, including, but not limited to, roof or roofing replacement short of complete replacement of membrane or structure; repainting of interior or exterior surfaces; resurfacing of floors; repair or replacement of glass; repair of hardware, furniture, equipment,

electrical fixtures, and plumbing fixtures; and repair or resurfacing of parking lots, roads, and walkways. "Maintenance and repair" shall not include renovation except for the replacement of equipment with new equipment of equal systems meeting current code requirements, provided that the replacement item neither places increased demand upon utilities services or structural supports nor adversely affects the function of safety to life systems.

MEDIA CENTER: An area specifically designed or adapted as a place for study, reading, and the custody, circulation, and administration of a collection of books, manuscripts, and periodicals kept for use by the student body.

MULTIPURPOSE ROOM: An instructional area designed or adapted specifically for two or more of the combined functions that might normally be used for assemblies, physical education, lunch, music, clubs, audiovisual work, and library services. Separate gymnasiums and cafeteriums are not classified as multipurpose rooms.

MUSIC ROOM: An instructional area designed or provided with special built-in equipment for learning activities involving choral and instrumental music.

NEW CONSTRUCTION: Any construction of a building or unit of a building in which the entire work is new or an entirely new addition connected to an existing building or which adds additional square footage to the space inventory.

N.S.F.: Net Square Feet.

PARCEL: The unique acreage of contiguous land. Typically consists of a plot of land that is not divided by a county, city, state, or federally owned or maintained road or highway.

Glossary of Terms

PROJECT FEASIBILITY STUDY: A project and site evaluation study to determine the suitability of the site for the project in question. A pre-design architectural study which may look at various scenarios before an architect is engaged to design the renovation or new construction.

PUBLIC SCHOOL CONSTRUCTION PROGRAM (PSCP): The Maryland Public School Construction Program funds the cost of constructing certain school capital improvements or portions thereof up to the extent of the approvals by the Board of Public Works and consistent with the current regulations, subject to annual appropriations.

RENOVATION: The rejuvenating or upgrading of existing facilities by installation or replacement of materials and equipment and includes, but is not limited to, interior or exterior reconditioning of facilities and spaces; air-conditioning, heating, or ventilating equipment; fire alarm system; emergency lighting; electrical systems; and complete roofing or roof replacement, including replacement of membrane or structure. (In this context, the term "materials" does not include instructional materials.) PSCP distinguishes between different types of renovations, depending upon their scope.

REPLACEMENT: Projects to replace the majority or the entirety of an existing school where the cost of renovation is prohibitive, or site/building layout and other technical factors make renovation of the entire structure infeasible. Replacement may include expansion to increase capacity, and must typically be justified on the basis of a feasibility study.

RESOURCE ROOM: An instructional space used primarily to enhance and support, not supplant, instruction received in regular or special classrooms. Generally designed to accommodate fewer students than other classrooms.

ROOM: A space enclosed on all sides. Alcoves or recesses are not considered separate rooms and should be included in the NSF of the room where such spaces are found.

SITE: A space of ground occupied or to be occupied by an educational facility or program.

SITE DEVELOPMENT: Site development means work that must be performed on an unimproved site in order to make it usable for the desired purpose; or, work incidental to new construction or to make an addition usable.

SITE IMPROVEMENT: The work that must be performed on an existing site to improve its utilization, correct health and safety deficiencies meet special program needs or provide additional service areas. Site improvement incident to construction is the work that must be performed on a site as an accompaniment to the construction of an addition to an educational facility or for a modernization project.

USGBC: U.S. Green Building Council administers the LEED building program which certifies green buildings.